The Role of the Human Reward System in the Development of Salesperson-Customer Relationships: An Exploration of Companies in Complex Industrial Markets in Central Europe

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Abstract

Previous studies have investigated the application of insights from social cognitive neuroscience to strategy, to leadership, to economy or to consumer marketing, for example. However, few, if any, studies have done so in relation to the field of salesperson-customer relationships. This is a significant omission because there is evidence that research from this nascent field has the potential to provide sales personnel with additional knowledge of how a salesperson-customer relationship can be established, developed and maintained. Based on a systematic literature review of B2C, B2B, high-technology and social cognitive neuroscience literature, this study introduces new constructs (*social domains of experience*) to explore sales relationships and to reflect on the role and the value of applying insights from social cognitive neuroscience to these relationships. These social domains of experience provided a platform to integrate well established salesperson-customer relationship concepts and recent research from social cognitive neuroscience. Therefore, this study offers new insights into factors that contribute to relationship development and maintenance, and it reinforces previous work in salesperson-customer relationships. The author adopts a critical realist position, utilising a cross-sectional, exploratory and qualitative approach. 18 senior executive salespeople and four high-level customers from the high-technology B2B sector in Central Europe were purposively sampled, and data was gathered via 22 in-depth face-to-face interviews and three structured participant observations. This provided detailed information on the development and maintenance of the focal relationships and enabled the five social domains of experience in this study to be identified, explored and elaborated. The outcomes of the study are reflected in the finalised conceptual framework, which opens up a window into the black box of the customer's mind and highlights the significant role that the Human Reward System plays in the sales process. This study also provides an insight into the way in which sales personnel could influence aspects of the sales situation to create positive relationship outcomes. However, there are some limitations due to the idiosyncratic nature of the salesperson-customer relationship and also the techniques that neuroscientists use nowadays while they are performing their experiments on the sample selection. Despite these issues, the application of insights from social cognitive neuroscience could add value to existing salesperson-customer relationship concepts. This added value could in turn provide researchers with further tools to continue to push the boundaries and better understand salesperson-customer interactions and the customer's unconscious mind during the decision-making process as a result. The findings of this study also offer sales personnel the chance to learn more about their role as relationship builders and potentially achieve important outcomes such as increased purchases and repurchases and positive word-of-mouth (WOM).

Declaration of Original Content

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

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List of Abbreviations

Abbreviation	Definition	Description
B2B	Business-to-Business	Selling of industrial goods and services from seller to buyer company.
B2C	Business-to-Consumer	Selling of consumer goods and services from seller company to end customers.
C2C	Consumer-to-Consumer	Selling of consumer goods and services from individuals and private person to end customers.
CEO	Chief Executive Officer	Highest-ranking corporate officer in charge of the overall management of an organisation.
CRM	Customer-Relationship-Management	Widely implemented strategy for managing a company's interactions with customers, clients and sales prospects.
EEG	Electro Encephalo Graphy	Recording of electrical activity along the anatomical area bordered by the face anteriorly and the neck to the sides posteriorly.
fMRI	Functional Magnetic Resonance Imaging	Procedure that measures brain activity by detecting associated changes in blood flow.
KIS	Knowledge-Intensive Services	Services and business operations which are heavily reliant on professional knowledge and which need knowledge-intensive support for the business processes.
LKIS	Less Knowledge-Intensive Services	Services and business operations which are less reliant on professional knowledge and which need less knowledge-intensive support.
MEG	Magneto Encephalo Graphy	Technique for mapping brain activity by recording magnetic fields produced by electrical currents occurring naturally in the brain, using arrays of SQUIDs (superconducting quantum interference devices).
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européenne (French)	Statistical classification of economic activities in the European Community; Source: Eurostat, dated 03.05.2016

PET	Positron Emission Tomography	Nuclear medicine imaging technique that produces a three-dimensional image or picture of functional metabolic processes in the body.
R&D	Research & Development	Research & Development includes specific and systematic activities based on scientific methods with the goal of acquiring new knowledge.
RMET	Reading the Mind in the Eyes Test	A test which measures the mentalising capability of a person to understand the particular emotional state.
C-system	Reflective system	Refers to the controlled social cognition neural system. The responses are more logical and the process distinctly intentional. This conscious process has an effect on cooperative, loyal and referral behaviour.
X-system	Reflexive system	Refers to the automatic social cognition neural system. The responses are more emotional and the process more spontaneous. This unconscious process has effects on cooperative, loyal and referral behaviour.
ROI	Return on Investment	Is a key figure indicating the ratio between profit and invested capital.
WOM	Word-of-mouth	Is an informal, positive or negative expression of opinion or recommendation between customers about products, services, brands, companies or salespeople.

Acknowledgements

I   INTRODUCTION AND OUTLINE

1.1   Introduction

A salesperson serves as the most important interface between buyer and seller organisations, which means he also has a boundary spanner function (Bradford, Crant, & Phillips, 2009; Swan, Bowers, & Richardson, 1999). The researcher of this study therefore argues that a salesperson in this role needs to understand and implement the latest findings on sales techniques during his interactions with customers and while developing and fostering these relationships. It is therefore important that salespeople and their interactions with customers are researched in-depth and that their sales techniques are kept up-to-date with the latest findings from nascent research areas such as social cognitive neuroscience. Thus, the aim of this study is to discover exactly what kind of additional insights can be gained from social cognitive neuroscience about the process of building and maintaining long-term salesperson-customer relationships.

This study focuses specifically on the development and maintenance of long-term salesperson-customer relationships within the research field of relationship marketing. It also presents insights from social cognitive neuroscience and it explains how relationship marketing researchers can potentially benefit from this research field. A systematic literature review was conducted of business-to-consumer (B2C), business-to-business (B2B) and high-technology literature to provide a deeper insight into how long-term salesperson-customer relationships can be developed and maintained, and to shed light on relevant approaches from social cognitive neuroscience which will add value to these relationships. Social cognitive neuroscience literature was reviewed in depth and it was used as a support to better understand the customer's unconscious mind during the decision-making process. Connections are drawn to neuromarketing, which investigates consumer behaviour in the B2C context and connects the research field of social cognitive neuroscience with the study of consumer behaviour (Daugherty & Hoffman, 2017; Meckl-Sloan, 2015; Morin, 2011; Varshney, 2016). Neuromarketing has already started to implement some insights from the research field of social cognitive neuroscience.

Within this focus, this study is one of the first to apply insights from social cognitive neuroscience to the field of salesperson-customer relationships. This study's main contribution is a finalised conceptual framework which creates a window into the black box of the customer's mind by synthesising theory from the literature review and empirically defined topics and concepts. This finalised conceptual framework integrates the social domains of experience, empirically defined topics and concepts and the human reward system. It will help managers and sales staff to understand the role that the human reward system plays in the development and maintenance of a long-term salesperson-customer relationship, and it will contribute to best practice behavioural guidelines. This in turn could offer salespeople a way to better understand and explain how to achieve important outcomes such as increased purchases and repurchases and positive WOM.

Since the research field of social cognitive neuroscience is a burgeoning interdisciplinary field of research, its full potential is just starting to become known; a great deal more research

and many more studies are needed to fully understand it (Daugherty & Hoffman, 2017; Meckl-Sloan, 2015). There are also reservations about data accuracy and limitations regarding neuroimaging technologies which must be taken into account when applying insights from neuroscience to marketing (Hammou, Galib, & Melloul, 2013; Mileti, Guido, & Prete, 2016). Despite the limitations, social cognitive neuroscience has already attracted a broad academic audience and it offers the very real possibility (Hammou et al., 2013; Javor, Koller, Lee, Chamberlain, & Ransmayr, 2013) that salespeople will be able to better understand their targeted customers in the future (Randolph, Borders, & Loe, 2013).

This study is written in the masculine form for simplicity and ease of reading. All terms apply in the same way also for the feminine form.

1.2 Study Background

Neuromarketing, also known as consumer neuroscience, is a relatively new research field which integrates neuroscientific methods, theories and insights into consumer behaviour research (Meckl-Sloan, 2015; Morin, 2011; Varshney, 2016). With this practice, traditional behavioural approaches are complemented with new insights from neuroscience (Kenning, 2014). In the past, marketing researchers and practitioners relied mainly on self-reported statements on how customers feel when they see an advertisement or when they make a purchase decision. However, these self-reported evaluations and judgements may be vulnerable to common method bias (Dimoka, Pavlou, & Davis, 2007) because people's feelings are influenced by cognitive processes (López, López, & Ayala, 2016). Nowadays, neuroscientists know that these cognitive processes cannot be described by customers as they occur unconsciously and often lead to a purchase decision based on a gut feeling (O'Connell, Walden, & Pohlmann, 2011). Secondly, many research participants may not report their true feelings due to factors such as incentives, time or group pressure (Morin, 2011). This then leads to a mismatch between the findings of traditional marketing researchers and the actual customer behaviour at the time of seeing an advertisement or making a purchase decision. Consequently, it is difficult for researchers using traditional methods to fully understand how a customer makes his buying decisions.

Traditional marketing techniques fail to look into the unconscious processes which occur in the human brain (Agarwal & Dutta, 2015). While traditional marketing research is mainly based on empirical techniques such as interviews, observations and focus groups, neuroscience offers researchers and practitioners powerful imaging tools to study the decision-making process, which is based more on intuition and cognition than on logical reasoning (Morin, 2011). Neuroimaging techniques measure brain responses directly rather than in the indirect manner common to traditional marketing research (Dimoka et al., 2007; O'Connell et al., 2011). Thus, the findings from neuroimaging techniques may complement traditional empirical techniques and help researchers to better understand consumer behaviour (Dimoka et al., 2007). Neuroscientists such as Ćosić (2016) hope to obtain more

insights into the unconscious drivers of preference and choice, and into the neural system processes of emotions, motivation, attention, sense and memory, which is still not possible with traditional empirical techniques.

In the last decade, neuroscience has helped marketing science in many ways to gain deeper insights into consumer behaviour and to investigate the unconscious processes at play (Agarwal & Dutta, 2015). Consumer neuroscience is concerned with the scientific study of behaviour (Wernicke, 2012), and it investigates the basic neural processes underlying the human ability to make considered decisions (Plassmann, Venkatraman, Huettel, & Yoon, 2015). As mentioned above, purchase decisions may be based on a gut feeling because unconscious processes cannot yet be explained by human beings. A gut feeling is the ability to explain matters without conscious reasoning. Neuroscientists describe a gut feeling as a pattern-recognising neural network driven by a cognitive process which compares data from a stimulus with data obtained from earlier experiences stored in the brain's memory (Stewart, 2002). Bonabeau (2003) described a gut feeling as one which allows a person to interpret a phenomenon and draw conclusions without consciously engaging their mind. Therefore, the researcher of this study argues that salespeople must be capable of recognising the unconscious mind and the emotions of the customer because they both influence the customer's purchase decision-making process far more than was previously thought (Carter, 2009; Lieberman, 2000; Randolph et al., 2013).

Neuroscience researchers have investigated social intuition and found that intuition in general is connected with the unconscious mind and with the emotions (Bonabeau, 2003; Lieberman, 2007). When analysing emotions, neuroscientists have included social, cognitive and neural levels in their analysis (Carter, 2009; Lieberman, 2000). Unconscious processes in the human brain can be made visible with functional neuroimaging techniques (fMRI, PET, EEG and MEG), thereby allowing researchers to better understand and attempt to explain how our brain works (Lieberman, 2007). Social cognitive neuroscience uses functional neuroimaging techniques that investigate several regions of the brain and its structures through specific stimuli (Page & Raymond, 2006). In addition to that, neurotransmitters in the brain, namely dopamine, oxytocin, vasopressin and serotonin, are involved in decision-making processes such as buying a product or trusting someone (Borum, 2010; Randolph et al., 2013). These neuroimaging techniques coupled with the action of neurotransmitters allow processes in the human brain to be better understood because they permit a bias-free view of the consumer's mind and his experiences (O'Connell et al., 2011; Prelec, 2013). The findings of this neuroscientific research field could be applied in the salesperson-customer context. The research into cognitive and affective human processes is still in its infancy (Morin, 2011). This explains why there are very few studies currently which rely on the findings of functional neuroimaging technology to obtain a direct insight into the brain to find out what and how people really experience as rewarding or threatening situations (Dimoka, 2010; Rock, 2011). Consequently, neuroscience may provide salespeople and marketing researchers with an alternative approach to better understand the customer's purchase decisions, thereby offering a way to improve their own sales techniques and methods in the process (Randolph et al., 2013).

Therefore, salesperson-customer relationship researchers need to know how to map the customer experience and improve their use of these neuroscientific insights in their existing methods. This could potentially result in the development of advanced empirical methods, which may in turn also benefit neuroscience (Javor et al., 2013). This means neuroscience could potentially help the marketing community to better understand the consumer's mind, while the marketing community could provide neuroscientists with empirical data to refine their techniques and methods. There are overlapping research topics in neurology and in consumer neuroscience from which both research fields could benefit; for example, the human reward system and the trust-building process (Borum, 2010; Javor et al., 2013).

The human reward system is relatively unknown in empirical research, whereas trust and the trust-building process have been researched in depth to date (Petermann, 2013). Neuroscientists discovered that the act of purchase is a behaviour that is at least partially determined by the reward system, which in turn is part of the brain's trust network (Javor et al., 2013). In this connection, there are two circumstances which give occasion for further research: Firstly, neurological investigations into the unconscious mind and emotions include the human reward system and how it can be stimulated through specific external or internal stimuli (Carter, 2009; Page & Raymond, 2006). The unconscious mind consists of brain areas and neural networks which can be described with social domains of experience. These social domains of experience could be potentially addressed through behaviours that address the other people's experience (Rock, 2009). This means that there are social domains of experience which may integrate the unconscious mind of a customer and address the human reward system, which has the potential to produce interpersonal reward situations in the customer's brain. Secondly, the heavily researched concept of trust can contribute to the definition of relationship quality, and plays a central role in a customer's decision-making process (Palmatier, 2008). Trust and rewards activate, among others, the same brain networks (caudate nucleus) (Dimoka et al., 2007). Thus, trust could add to researchers' understanding of the human reward system. For these reasons, this study reviews existing literature on the concept of trust, commitment, satisfaction and the antecedents and consequences of relationship quality, and explains the long-term salesperson-customer relationship from this perspective (Chapter 3).

When applying neuroscience to marketing science, it is no longer just about the 4 Ps of the marketing mix – price, product, promotion, and place – but rather about *"seeing the experience, feeling wowed by the experience, having that feeling embedded in memory and creating the emotional connection that makes the customer want to return and stay with that company in the long term – in effect, creating loyalty"* (O'Connell et al., 2011, p. 9). Hence, the economic realities behind experience centre around loyalty, recommendation and customer value. In this context, neuroscientists have found five sources of evidence which support the assumption that the unconscious mind plays a major role in *"feeling wowed by the experience"*, in decision-making in general and in purchase decisions in particular. Therefore, these five sources of evidence from neuroscientific research could be applied to market research (O'Connell et al., 2011), namely: (1) most of the human brain processes occur unconsciously and without the awareness of logical reasoning; (2) most of the unconscious processes are

emotional and not logical; (3) unconscious processes have an enormous effect on attitudes, decisions and consumer behaviour; (4) unconscious processes do not control human beings fully, but they do influence decision-making; (5) consumers cannot express the underlying unconscious process in words because they are not aware of it. For these reasons, the researcher of this study deemed it important to combine emotional and logical processes and apply them to salesperson-customer research as well.

With these five sources of evidence, neuromarketing has gained significant knowledge about the affective and cognitive brain processes, the limbic system, (responsible for affective processing), and the pre-frontal cortex, (responsible for higher cognitive processing), as well as the human reward system and the decision-making process (Dimoka et al., 2007; Randolph et al., 2013; Schultz, 2006). Although there are promising studies on purchase behaviour, e.g. Bateman and Valentine (2015), there seems to be a research gap in understanding how the human reward system affects interactions between salespeople and customers and the decision-making process in this context (Javor et al., 2013). However, brain research alone is not the magic formula to create a window into the black box of the customer's mind (de Oliveira, Giraldi, & dos Santos, 2014). It only makes sense to apply insights from neuroscience if the findings are linked with the investigation of processes in the brain with psychology and market research (O'Connell et al., 2011).

Emerging research has revealed that the customer's eagerness to buy complex and customised products and services is an emotional process in which the brain uses a number of shortcuts to hasten the decision-making process due to the complexity of the business (Varshney, 2016). The human brain always searches for well-known patterns (Carter, 2009), especially in new situations. These patterns are stored in our brain and may distort our decisions, as certain new facts will be lost in new situations (Bonabeau, 2003). This is because human beings do not have sufficient brain capacity to process large amounts of social information (Borum, 2010). In an attempt to recognise patterns, certain biases occur that do not necessarily lead to the desired outcome (Bonabeau, 2003), such as the sucessful conclusion of a sale. These limitations affect the customer's brain as well as that of the salesperson. The one who is aware of this insight has an advantage because he can include this insight in his sales negotiations.

Borum (2010) pointed out these biases due to the limited brain capacity in his study. He particularly emphasised the limitations of the human brain during the processing of large amounts of complex social information and specifically when planning, such as to purchase a complex and customised product or service. He also pointed out that there are two complementary neural systems in our brain which process data and may influence the decision to purchase, repurchase or to refer. One system is the automatic social cognition system, which operates fast yet learns slowly; while the other is the controlled social cognition system, which operates slowly and learns fast. The former relates to reflexive processes and generates more emotional responses and is more spontaneous and intuitional. The latter relates to reflective processes, generates more logical responses and is more intentional and deliberative. These two complementary processes allow us to understand

the thoughts and feelings of another person (Lieberman, 2007) and the related attention, emotion and memory (O'Connell et al., 2011). Thus, intuition and deliberation are both important aspects for the development of a long-term salesperson-customer relationship (Locander, Mulki, & Weinberg, 2014).

Researchers hope to gain advanced ground-breaking knowledge of existing concepts by implementing the latest findings from social cognitive neuroscience (Morin, 2011; Powell, 2011; Rock, 2011). These new neuroimaging findings have already been incorporated into existing concepts in different fields such as economics, leadership and strategy. New fields of research called neuroeconomics (Meckl-Sloan, 2015), neuroleadership (Rock, 2011) and neurostrategy (Powell, 2011) are beginning to emerge. The application of the discipline of social cognitive neuroscience promises new insights into the salesperson-customer context by combining existing relationship marketing concepts with the latest findings from neuroscience. Interestingly, the core methodology for B2C is the same as for B2B. Although the stimuli or touchpoints are different, B2B business involves person-to-person, respectively brain-to-brain interaction (O'Connell et al., 2011).

This study attempts to demonstrate empirically, by means of the salesperson's cognitive abilities and skills, how neurological findings can augment researchers' current understanding of the development of long-term salesperson-customer relationships. It focuses on the explanation of how *interpersonal reward situations* can potentially be produced in the customer's brain via the *social domains of experience*, combining insights from neuroscience with existing salesperson-customer relationship constructs. Through the relationship antecedents (i.e., activities in relational marketing) of a long-term relationship (Palmatier, 2008), salespeople should be aware of how they can affect the customer's brain to generate rewarding (positive) and non-threating (negative) situations because rewarding situations may positively influence the customer's decision-making process (Fugate, 2008). These relationship antecedents not only appear to generate rewarding situations but also influence the development of a long-term salesperson-customer relationship and the consequences thereof, such as purchase and repurchase intentions and positive WOM (Palmatier, 2008). With the latest neuroscientific findings and with the application of these findings to relationship marketing (Chapter 2), salespeople would have the opportunity to greatly improve their understanding of the emotional process which occurs during the customer's purchase decision and combine this with logical reasoning. This insight is important to better understand and then to improve sales techniques and salesperson-customer interactions.

Part of this emotional process encompasses the explanation of how to potentially produce interpersonal reward situations (Section 2.2.4). Such situations are pleasurable situations in the customer's brain produced through the cognitive performance of the salesperson's (Section 2.2.5). This cognitive performance has the potential to address the customer's thoughts, feelings, attention, emotions and memory, which then creates an urge in the customer's reward system and motivates the customer to start interacting with the salesperson socially. However, this process has not yet been investigated and will not be explored in this study. This will be the task of further neuroscientific research. Hence, the

research gap of this study stems from the fact that, to the best of the researcher's knowledge and belief, nobody has ever investigated what kind of additional insights can be gained from social cognitive neuroscience into the process of building and maintaining long-term salesperson-customer relationships. Social domains of experience have the potential to integrate well established salesperson-customer concepts and new information from social cognitive neuroscience to close this gap. The dearth of knowledge in this area is also one reason why salespeople cannot understand the customer's intuitive decision-making process when it comes to purchase, repurchase or positive WOM.

The lack of knowledge about the customer's intuitive decision-making process often leads to uncertainties, which can cause the salesperson to make an error in judgement (Dimoka, 2010). As a result, threating situations may occur within the customer's brain and have a negative impact on his behavioural patterns. Neuroscience offers an additional lens with which to view the development of a salesperson-customer relationship and to potentially generate interpersonal reward situations in the customer's brain. Rewarding situations may lead to the development of a long-term salesperson-customer relationship and consequently to purchase and repurchase initiatives, and to positive WOM. A better understanding of the cognitive processes underlying the human reward system may result in competitive advantages over fellow campaigners such as other salespeople or sales organisations (Ahearne, Jelinek, & Jones, 2007). In the context of salesperson-customer relationships in the field of relationship marketing, this study will therefore provide salespeople with important complementary neuroscientific information to help them better understand the customer's unconscious mind during their sales interactions with their customers (Section 1.5).

Previous studies examining the dimensions and antecedents of salesperson-customer relationships, e.g. Guenzi and Georges (2010), have not considered the role of the human reward system (automatic and controlled social cognition system) and in particular the manner in which salespeople could attempt to produce interpersonal reward situations that lead to the development of long-term salesperson-customer relationships. Little is known about precisely how interpersonal reward situations could lead to the development of long-term salesperson-customer relationships and what triggers or drives the process (Dimoka, 2010; Page & Raymond, 2006; Rock, 2009; Tabibnia & Lieberman, 2007). The existing literature falls short in explaining how the salesperson's cognitive performance could influence a customer's mind to such an extent that he is consciously willing to develop a long-term relationship with the salesperson, and why he made the decision to purchase. Consequently, social cognitive neuroscience combined with existing literature on dimensions of salesperson-customer relationships offers an interesting avenue to explore the process (how) dimension of building long-term relationships, and complementary approaches such as these hold great promise for both current and future research in the salesperson-customer research domain (Dimoka et al., 2007).

As mentioned earlier, the customer's unconscious mind can be viewed as a black box (de Oliveira et al., 2014). If a window were created into this black box and the black box rationally explained with empirical data including the latest neuroscientific evidence, this may

help researchers to better understand how long-term salesperson-customer relationships develop and how customers make the decision to purchase, to repurchase or to recommend. The guiding framework below (Figure 1) shows the links between the concepts that provide the foundation for this thesis.

Figure 1: Guiding Framework
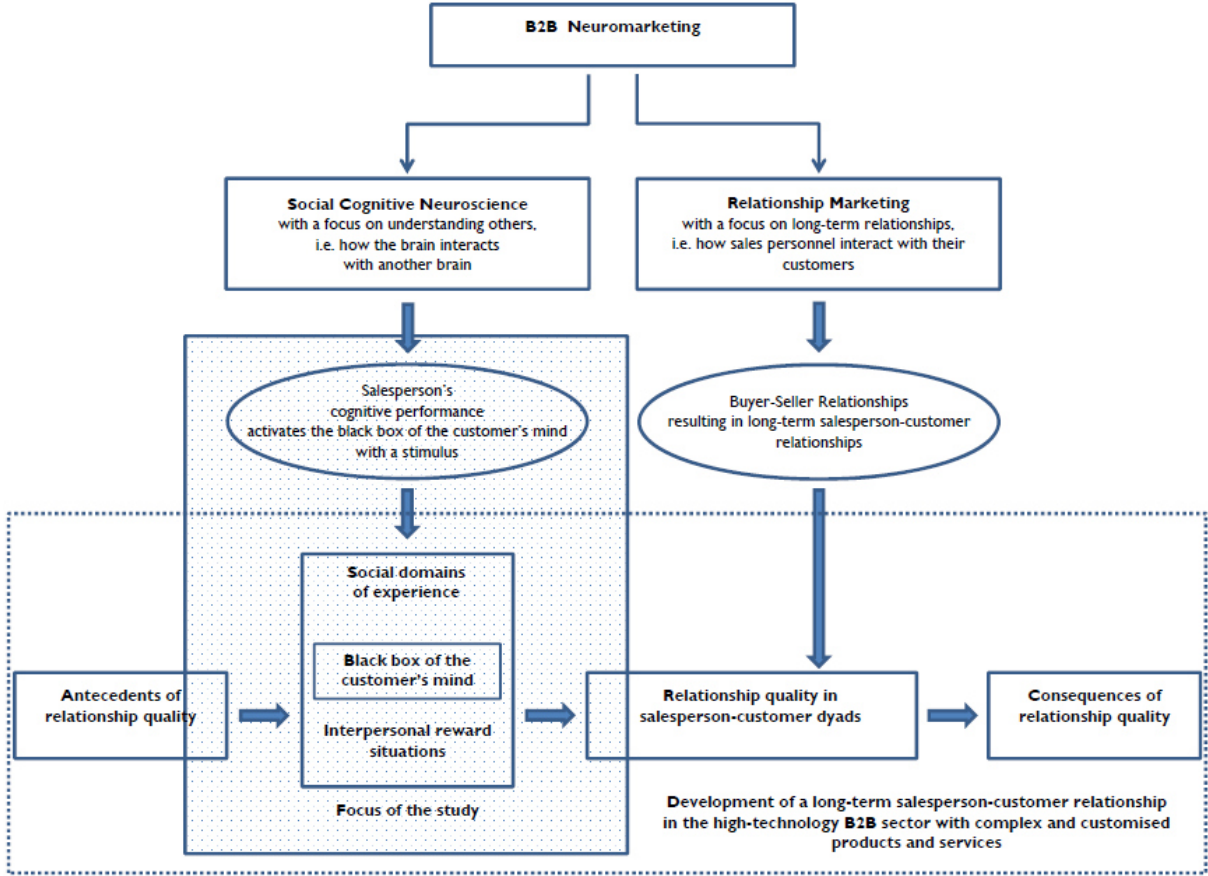
Source: Author

B2B neuromarketing bridges social cognitive neuroscience and relationship marketing. On the one hand, social cognitive neuroscience focuses on understanding others, i.e. how one brain interacts with another. Relationship marketing, on the other hand, focuses on long-term relationships, i.e. how salespeople interact with their customers. If a salesperson has the necessary ability and knowledge to understand how interpersonal reward situations could be produced, this will expand his cognitive performance, and in turn potentially influence the customer's unconscious mind and purchase decisions. Relationship quality, along with trust, commitment and satisfaction, which are the most commonly mentioned concepts within the literature, is a characteristic of long-term salesperson-customer relationships (Palmatier, 2008).

The existing literature, e.g. Guenzi and Georges (2010), or Swan et al. (1999), shows what salespeople do to establish, develop and maintain long-term salesperson-customer relationships with specific relationship antecedents. It also shows what the consequences of

a long-term salesperson-customer relationship are. However, the literature does not delve into how salespeople attempt to produce interpersonal reward situations that lead to the development of a long-term salesperson customer relationship. In this case, the findings from social cognitive neuroscience may help researchers and practitioners to create a window into the black box of the customer's mind (de Oliveira et al., 2014; Dimoka et al., 2007; López et al., 2016) and to better understand him. It therefore can be argued that this could potentially improve sales techniques and salesperson-customer interactions.

Three aspects from salesperson-customer relationships are of special interest within the context of this study. Firstly, relationship antecedents, which focus on understanding others or how the brain interacts with another brain. Secondly, the consequences for a long-term salesperson-customer relationship, and finally, how salespeople interact with their customers. According to the well-established literature on long-term salesperson-customer relationships, these antecedents must be connected to the relationship between a customer and a salesperson (Ingram, LaForge, Avila, Schwepker Jr., & Williams, 2008; Swan et al., 1999). Furthermore, the antecedents must not only have an impact on the relationship but also on the consequences of the relationship (Morgan & Hunt, 1994; Palmatier, Dant, Grewal, & Evans, 2006) to demonstrate that the salesperson's cognitive performance may have a positive impact on the outcome of a sales discussion. If these aspects were investigated further, this could improve researchers' understanding of how a long-term salesperson-customer relationship is developed and maintained.

1.3   Research Aim, Objectives and Questions

In the research field of salesperson-customer relationships, researchers and practitioners are already well versed in how to develop and maintain these relationships. However, they know little about the kind of processes in the customer's mind that occur during the development and maintenance of these relationships. The existing literature on social cognitive neuroscience and its application to market research (Meckl-Sloan, 2015; Varshney, 2016) suggests that social cognitive neuroscience can improve this understanding by gaining further insights into the functioning of the customer's brain and their underlying processes. It could therefore be argued that this will also improve researchers' and practitioners' understanding of unconscious brain processes (Agarwal & Dutta, 2015), thereby offering a way to improve the sales personnel's sales techniques and methods in the process (Randolph et al., 2013).

Therefore, the aim of the current study is to discover exactly what kind of additional insights can be gained from social cognitive neuroscience about the process of building and maintaining long-term salesperson-customer relationships. This will be achieved by exploring social domains of experience, which have the potential to integrate well established salesperson-customer concepts and new insights from social cognitive neuroscience. Empirically associated topics and concepts will be defined to reinforce existing concepts and on the other hand, while the fundamental principle of the human reward system and the

related maximisation of rewarding and minimising of threatening situations which drive human motivation (Gordon, 2000) will be integrated to add the neuroscientific perspective. In doing so, the study will provide a better understanding of sales techniques and salesperson-customer interactions.

The following objectives have been formulated to this end:

Research objective 1: To critically review the literature on social cognitive neuroscience and its application to the field of buyer-seller relationships in general and to salesperson-customer dyads in particular.

Research objective 2: To discuss the characteristics of long-term salesperson-customer relationships and to examine the role of the human reward system in the development and maintenance of these relationships.

Research objective 3: To create a more detailed conceptual framework which combines the current knowledge of the psychological antecedents of salesperson-customer relationships with insights from the human reward system.

Research objective 4: To explore how salespeople attempt to produce interpersonal reward situations in the customer's brain.

Research objective 5: To present a finalised conceptual framework which synthesises the insights from the literature with the empirical findings, and to discuss the contributions and implications for managers and sales staff.

These research objectives have been reworded into the following research questions:

Research question 1: How can social cognitive neuroscience be applied to the field of buyer-seller relationships in general and to salesperson-customer dyads in particular?

Research question 2a: What are the characteristics of long-term salesperson-customer relationships?

Research question 2b: What is the role of the human reward system in the development and maintenance of these relationships?

Research question 3: How can we conceptualise the relationship between the psychological antecedents of salesperson-customer relationships and the current understanding of the human reward system?

Research question 4: How do salespeople attempt to produce interpersonal reward situations in the customer's brain?

Research question 5a: How can the initial conceptual framework be elaborated with the insights gained from the empirical findings?

Research question 5b: What are implications of the finalised conceptual framework for managers and researchers?

1.4   Methodological Foundations

This study takes the ontological and epistemological standpoint of critical realism in its investigation of the role of the human reward system in the development and maintenance of long-term salesperson-customer relationships. The researcher assumes that there is a real world which corresponds to the sensory perception, but he accepts that the real world is constructed by man's subjective interpretations and differing perceptions (Aust, 2006; Easton, 2010; Tuli, 2011). The realisation that every individual perceives reality in a different way is particularly relevant for this study because the researcher investigated individual senior executive salespeople and high-level customers, and focused mainly on their perception of how salesperson-customer relationships can be developed and maintained.

An exploratory, cross-sectional approach was chosen for the research methodology. Purposeful sampling was carried out with senior executive salespeople and high-level customers from 22 companies within the high-technology B2B sector with complex and customised products and services in Central Europe.

Empirical data was gathered via in-depth face-to-face interviews with 18 senior executive salespeople and four high-level customers and three structured participant observations with senior executives to gain a full perspective of managerial-level insights into the development and maintenance of a long-term salesperson-customer relationship. An interview guide was specially developed and written for each of these two groups (Appendices A and B). In addition to that, a structured participant observation protocol was developed for the observations of the initial salesperson-customer meetings (Appendix C).

Category development within the qualitative content analysis (Mayring, 2010) was used to define five topics and underlying concepts which relate to the theoretically defined social domains of experience. The data from the four customers was used to complement the salespeople's perspectives. The observation data helped the researcher to understand the initial stage of a potential long-term salesperson-customer relationship.

All the data was analysed and discussed in-depth to gain a holistic overview of the finalised conceptual framework (Section 7.3, Figure 22), which represents the main contribution of the current study. The full research methodology leading to valid, reliable and bias-free data and findings will be discussed further in Chapter 5.

1.5   Significance of the Study

This study is one of the first to apply insights from social cognitive neuroscience to the field of salesperson-customer relationships, and its main contribution is a finalised conceptual framework which creates a window into the black box of the customer's mind. Therefore, this study is unique because it provides neuroscientific insights into the process of building and maintaining long-term salesperson-customer relationships.

The finalised conceptual framework will illustrate in detail how to create a window into the black box of the customer's mind. It will integrate the social domains of experience and the production of interpersonal reward situations into the current knowledge base related to developing and maintaining a long-term salesperson-customer relationship. In so doing, this study will identify the ways that well-established salesperson-customer concepts and the fundamental principle of the human reward system could be integrated into newly developed constructs, also referred to as social domains of experience, and consequently create a window into the black box of the customer's mind.

The finalised conceptual framework and related findings will show how a salesperson attempts to produce an interpersonal reward situation in the customer's mind. These findings will provide additional information on the link between these social domains of experience and the production of interpersonal reward situations to better understand the customer's unconscious mind during the decision-making process. Furthermore, the findings of the current study may help to improve researchers' understanding of the quality of the relationship between the salesperson and the customer. This is mainly due to the fact that relationship quality is an overarching construct which consists of several different components (François & Van Goolen, 2005), and that high-quality relationships result from elevated levels of trust, commitment and satisfaction (Wulf, Odekerken-Schroeder, & Iacobucci, 2001).

The finalised conceptual framework and the related findings will be especially beneficial to managers and sales staff as they will give them a tool to better understand how the customer's mind works during the development and maintenance of long-term salesperson-customer relationships. In addition to that, the findings will contribute to best practice behavioural guidelines to help the individual salesperson to be more successful in his discussions with the customer. This may lead to more purchases and repurchases, to a higher rate of positive WOM and therefore to a competitive advantage over one's competitors.

As indicated earlier in Section 1.1, while the application of insights from social cognitive neuroscience to relationship marketing shows great promise for future research (Javor et al., 2013), there are considerable limitations which must be taken into account (Hammou et al., 2013). The initial results are hard to interpret and are not yet fully understood due to the complexity of our human brain (Barkin, 2013). This tends to impact on the credibility of the data, which is one of the main limitations mentioned in the neuromarketing literature (Eser, Isin, & Tolon, 2011; Hubert & Kenning, 2008; Javor et al., 2013; Morin, 2011). Some companies try to derive advantages from the lack of information by interpreting and applying the findings of the research subjectively to suit their own purposes (Fortunato, Giraldi, & de Oliveira, 2014). Therefore, the limitations and weaknesses in terms of data accuracy and the technologies used within neuroscience must be carefully monitored and interpreted (Hammou et al., 2013; Mileti et al., 2016). A detailed summary of possible limitations is provided in Section 2.2.1.

Chapter 8 will outline the full contributions and implications of this study for managers and sales staff. In addition to that, it will address the study's limitations in general, and illustrate the limitations of applying social cognitive neuroscience to relationship marketing specifically. Finally, suggestions for further research will be made.

1.6 Structure of the Study

This study is divided into eight chapters. The structure of the study (Figure 2) follows the guiding framework (Figure 1), and the chapters are set up accordingly.

Figure 2: Structure of the Study
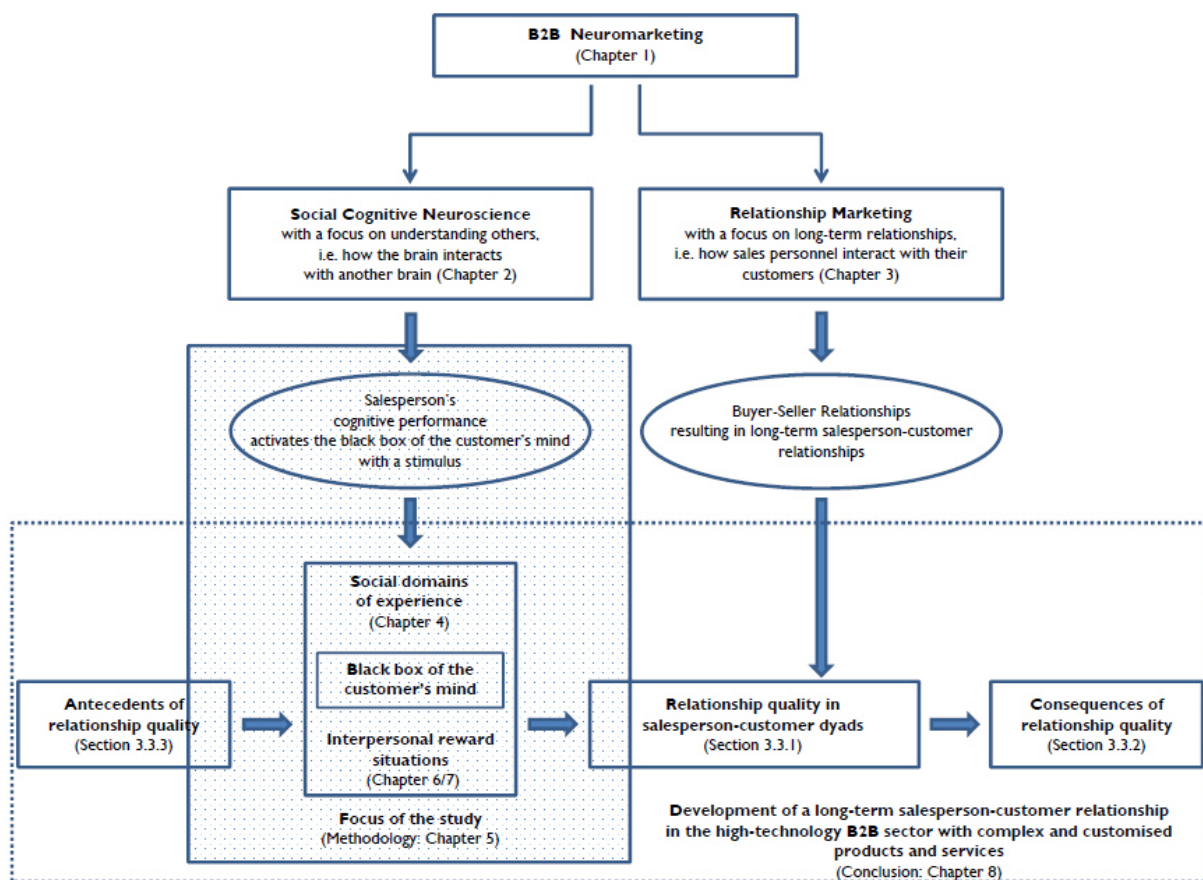
Source: Author

Chapter 1 has opened the thesis by presenting a short introduction, describing the study background, stating the research aim, objectives and questions, outlining the methodological foundations, discussing the significance of the study, providing the structure of the study, and finally, by concluding this introductory chapter.

Chapter 2 will provide a literature review of the domain of social cognitive neuroscience and its importance for relationship marketing, buyer-seller relationships in general and salesperson-customer dyads in particular, while also outlining its limitations. Therefore, the

literature in this chapter is mainly drawn from B2C as well as from social cognitive neuroscience to gain a better understanding of the human mind and how this could add value to the development of long-term salesperson-customer relationships. Furthermore, it will provide an overview of the study topic, but also include critical elements that highlight significant research gaps, particularly in relation to the application of B2B. Finally, this chapter will present the initial conceptual framework, which includes the dual-process framework of the human reward system.

Chapter 3 will provide a critical literature review of the characteristics of a long-term salesperson-customer relationship. It will discuss the relationship marketing process, including the most frequently mentioned components of relationship quality and its psychological antecedents and behavioural consequences. Therefore, the literature in this chapter is mainly drawn from B2B, and insights from social cognitive neuroscience are presented to find important research gaps in the development and maintenance of long-term salesperson-customer relationships. This chapter will argue that any research into such relationships which does not consider the automatic and the controlled social cognition system underlying the human reward system lacks an important dimension. This is because personal selling and the effects of the human reward system are critical components of a successful long-term salesperson-customer relationship nowadays, and need to be considered during investigations into the topic.

Chapter 4 will discuss the social domains of experience and their connection to potential reward responses. A list of value criteria will be used to evaluate the relevant social domains of experience. It will table the social domains of experience, topical definitions, neurological associations and their equivalents in a salesperson-customer relationship. Furthermore, it will conceptualise the relationship between the social domains identified and the interpersonal reward situations produced in the customer's brain. Specifically, it will show how the black box of the customer's mind is conceptualised for this study. Finally, this chapter will present the elaborated conceptual framework from which the questions for the interview guides were developed.

Chapter 5 will discuss and justify the research methodology of the current study. As such, it will discuss the research philosophy, methodology and methods of data collection, analysis and interpretation. It will explain how the samples were selected, how the interviews were conducted and how the observations were carried out. In addition, it will describe how the data was recorded and transcribed, how the data analysis and its interpretation was done and how the quality of the data was ensured. Within the quality of the data discussion, possible limitations will be considered. Finally, it will outline how the principles of research ethics were addressed.

Chapter 6 will define the context in which the empirical data was collected and describe the characteristics of the participating salespeople and customers within this context. This chapter will be divided into four sections. An extract from the description of the sample of the participating companies, senior executive salespeople and high-level customers chosen for this study will be provided in the first two sections. The third section will discuss a

collection of responses from the interviewed senior executive salespeople and high-level customers. This collection includes differences raised in the interviews which offer additional exploration of the automatic social cognition system underlying the human reward system within the finalised conceptual framework. The final section will describe the early stage of a salesperson-customer relationship and the beginning of the co-creation process.

Chapter 7 will present and discuss the empirical findings for the five social domains of experience which emerged during the three phases of data collection. Specific topics and concepts related to each of the social domains of experience which appear to have the potential to produce interpersonal reward situations within the customer's brain will be outlined. Based on the literature review, the presentation and discussion of the data are therefore divided into the five categories: certainty, cooperation, fairness, autonomy and social status. Relevant quotes will be presented to set the context for each social domain of experience before the actual analysis is conducted. A discussion and a summary will be presented to show how salespeople attempt to produce interpersonal reward situations in the customer's mind and what salespeople do in specific customer contact situations to develop and maintain a long-term salesperson-customer relationship. Subsequently, the findings from the 22 face-to-face interviews with senior executive sales personnel and high-level customers and the three salesperson-customer observations will be presented in the finalised conceptual framework.

Chapter 8 will present the main outcome of the thesis, its importance for sales staff and how this was achieved. It will compare the other outcomes against the research objectives and provide starting points on how to transfer the findings to other contexts. It will further discuss the contributions of the study and provide a more in-depth description of the role of the technical salesperson. It will present the implications for managers and sales staff and provide guidelines for sales manager. Then the limitations will be addressed and directions for further research will be proposed.

The eight chapters will be followed by the References and Appendices. The appendices contain supplementary material, such as the interview guides for salespeople and for customers, the structured participant observation protocol, results from the structured participant observations, further details on the companies and salespeople who participated in this study and the NACE codes for industries and services.

1.7   Conclusion

The social domains of experience and their potential impacts on the human reward system have not been integrated into the development and maintenance of a long-term salesperson-customer relationship yet. This represents the research gap of this study in the field of salesperson-customer relationships. Since a salesperson serves as the most important interface between buyer and seller organisations (Bradford et al., 2009; Swan et al., 1999), the researcher of this study argues that a salesperson must have a better understanding of

the social domains of experience and their impacts on the human reward system to improve his sales techniques and be able to facilitate the development and maintenance of a long-term salesperson-customer relationship in the process. This means that a salesperson needs to be aware of the impacts of the social domains of experience and be able to incorporate them into the explanation of how a long-term salesperson-customer relationship develops. He must also realise that the social domains of experience have the potential to integrate well-established salesperson-customer concepts and the fundamental principle of the human reward system, which seem to explain how to produce interpersonal reward situations in the customer's mind.

Therefore, the aim of the current study is to discover exactly what kind of additional insights can be gained from social cognitive neuroscience about the process of building and maintaining long-term salesperson-customer relationships. This will be achieved by exploring social domains of experience, which have the potential to integrate empirically associated topics and concepts and on the other hand, the related maximisation of rewarding and minimising of threatening situations which drive human motivation (Gordon, 2000). In doing so, the study intends to help researchers and practitioners to better understand sales techniques and salesperson-customer interactions.

It is precisely this lack of knowledge of the human brain which is currently preventing researchers and practitioners in the field of B2B from investigating the customer's behaviour in greater depth (Agarwal & Dutta, 2015). In addition, the potential links between the social domains of experience and the production of interpersonal reward situations offer researchers and practitioners one way to create a window into the black box of the customer's mind (de Oliveira et al., 2014; Dimoka et al., 2007; López et al., 2016) and therefore to increase the former's understanding of the process of developing and maintaining long-term salesperson-customer relationships. The main contribution of this study will be a finalised conceptual framework which creates a window into the black box of the customer's mind (Chapter 8).

2   APPLICATION OF SOCIAL COGNITIVE NEUROSCIENCE TO RELATIONSHIP MARKETING

2.1   Introduction

Chapter 2 will explain the domain of social cognitive neuroscience and its importance for relationship marketing, buyer-seller relationships in general and salesperson-customer dyads in particular. Therefore, the literature in this chapter is mainly drawn from B2C as well as from social cognitive neuroscience to gain a better understanding of the human mind and how this could add value to the development of long-term salesperson-customer relationships. This chapter will not only provide an overview of the study topic but also highlight significant research gaps, particularly in relation to the application of insights from social cognitive neuroscience to B2B. It will begin by outlining the research field of social cognitive neuroscience, its functional neuroimaging techniques and its limitations (Section 2.2.1). Then it will classify the human brain and its social cognition processes (Section 2.2.2), illustrate the human reward system and highlight the significance of neurotransmitters (Section 2.2.3), describe the interpersonal reward situations in the human brain (Section 2.2.4), and discuss the salesperson's cognitive performance in buyer-seller relationships (Section 2.2.5) and the customer's decision-making process in salesperson-customer dyads (Section 2.2.6). The goal of this chapter is to show that marketing researchers can learn a lot from applying the findings from social cognitive neuroscience to relationship marketing, buyer-seller relationships and salesperson-customer dyads.

2.2   Importance of Social Cognitive Neuroscience for Relationship Marketing

Section 1.2 offered five sources of evidence of why neuroscience should be applied to market research. They appear to show that most human brain processes occur unconsciously, and that these processes are emotional rather than cognitive in nature (O'Connell, Walden, & Pohlmann, 2011). For this reason, it is important that emotional and cognitive human brain processes are incorporated into the development of scientific and practical questions because they will help researchers to better understand how people make decisions (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). This is what convinced researchers from other fields, e.g. Morin (2011); Powell (2011) and Rock (2011), that it was necessary to include insights from neuroscience and its fMRI techniques in their approaches. As a result, researchers from fields such as economics, leadership, strategy and consumer marketing also included basic neuroscientific research in their approaches (Meckl-Sloan, 2015; Morin, 2011; Powell, 2011; Rock, 2011; Varshney, 2016), all with the goal of improving their understanding of how people make decisions in specific environments (Bolliger & Koob, 2013). The merger of market research and neuroscience resulted in the field of consumer neuroscience.

Consumer neuroscience integrates neuroscientific methods, theories and knowledge into consumer behaviour research and complements traditional behavioural approaches with new insights from neuroscience (Kenning, 2014). Emotions and motivation are major reasons why

people make decisions in general and purchase decisions in particular (Randolph et al., 2013). To find out how emotions and motivation influence purchase decisions and to possibly influence this at a certain time, neuroscientists and marketing researchers investigate the centre of human feelings and actions, namely the human brain (Ćosić, 2016). Researchers use functional neuroimaging techniques (fMRI, PET, EEG and MEG) to investigate customers' thoughts and feelings and thus the unconscious decision-making process, which allows them to explain how our brain works (Dimoka et al., 2007; Lieberman, 2007). This technology enables a deeper and more detailed analysis of the customer's decision-making behaviour than the traditional methods in market research. With functional neuroimaging techniques, it is possible to measure emotions and motivation and to locate them in certain brain areas. In doing so, researchers differentiate between conscious and unconscious decisions and identify the factors which influence these decisions (Bolliger & Koob, 2013). Consumer marketing researchers believe that this constitutes a solid foundation for theories and hypotheses about the antecedents and consequences of consumer behaviour, which concentrate on the biopsychosocial mechanisms of the human brain (Plassmann, Venkatraman, Huettel, & Yoon, 2015). Hence, this study discusses the antecedents and consequences of the relationship quality in a long-term salesperson-customer relationship (Chapter 3). The antecedents each consist of cognitive and affective components, which include a combination of the automatic and controlled social cognition processes. These processes are a part of the black box of the customer's mind (Section 1.2).

The study of service announcements is one area of marketing where researchers and practitioners have been applying neuroscience for some time now (Fugate, 2008). This allows them to consider which specific functions of the brain are activated during the various stages of the consumer decision-making process. The goal is that service providers use this information to redefine their sales techniques to remain competitive in terms of pricing, negotiations and customer satisfaction (Hsu, 2016; Lee & Chamberlain, 2007; Powell, 2011). The application of neuroscience is of particular interest to service advertisement researchers because of the intangible nature of services. The key lies in the investigation of human interaction, which is rather difficult to do with traditional research methods and techniques. Furthermore, neuroscience could be applied to all forms of product, packaging and advertising marketing (Schneider & Woolgar, 2012).

Product brands and consumer behaviour and their effective segmentation of consumers with their varying needs (Venkatraman, Clithero, Fitzsimons, & Huettel, 2012) are one example of where the application of neuroscience shows promise in terms of offering direct access to the consumers' state of mind (Hsu, 2016) . With the latest neuroscientific findings, consumer neuroscience researchers hope to better understand the neural mechanisms of decision-making, which will enable marketers to better tailor their products to different consumer groups. In addition to having an effect on the decision-making process, including prices, selection strategy, context, experience and memory, neuroscientific findings offer marketers new insights into the individual differences in consumer behaviour and brand preferences (de Oliveira et al., 2014).

Another field of application is the study of pricing, which is important for an organisation's product positioning (Lee & Chamberlain, 2007). When buying a consumer product, the human motivation to make a certain decision stems from the conscious and the unconscious mind. It is always critical because emotional and cognitive factors are included in the decision to accept a price. Neuroscience, for example, can help consumer marketing provide a more dynamic pricing strategy because the terms *"conscious"* and *"unconscious"* presuppose that rational and emotional factors can be included in the selling strategy (Fugate, 2008).

When applying neuroscience to marketing, human exchanges and decision-making must be considered in all fields of application. Whether it is consumer marketing (B2C) or relationship marketing (B2B), pricing and negotiations between business partners are key factors (Lee & Chamberlain, 2007). The core methodology for B2C is the same as for B2B, but the stimuli or touchpoints are different (O'Connell et al., 2011). B2B business involves person-to-person, respectively brain-to-brain interaction, which are especially important for high-priced items when negotiations take place between business partners (de Oliveira et al., 2014). Though expert sales personnel can deliver impressive presentations, they still need to demonstrate additional knowledge and skills when selling highly customised products to meet the customers' requirements in such a way that a deal can be finalised in the end (Ingram, LaForge, Avila, Schwepker Jr., & Williams, 2008). Many salespeople are under intense pressure to find information to help them understand what drives their customers' attitudes and behaviour. This is because they want to gain an advantage over their competitors in critical sales situations (Ahearne, Jelinek, & Jones, 2007). Such an understanding will lead to them fulfilling their sales tasks. Researchers also apply neuroscience in B2B and try to give sales managers a practical guide to explore their customers' underlying thoughts, feelings and intentions (Hsu, 2016). They are able to do this because of the assessment of the customer's unconscious mind; in other words, the customer's limbic system (Häusel, 2015). This means that only sales personnel who can focus completely on the customer and who know how to potentially influence the customer's unconscious mind will be able to sell successfully (Morin, 2011).

An overview of the domain of social cognitive neuroscience and its importance for relationship marketing, buyer-seller relationships and salesperson-customer dyads will be given in the following sections. The goal is to highlight significant research gaps particularly in relation to the application of B2B relationship marketing, buyer-seller relationships and salesperson-customer dyads. Furthermore, potential future research topics will be addressed to derive information about the above-mentioned unconscious processes in the customer's brain.

2.2.1 Social Cognitive Neuroscience, its Functional Neuroimaging Techniques and its Limitations

The term social cognitive neuroscience was first used in connection with *"intuition"* (Lieberman, 2000, p. 109) and with *"emotion and memory"* (Ochsner & Schacter, 2000, p. 163). Ochsner and Lieberman (2001) defined social cognitive neuroscience as a means of

combining the social, cognitive and neural processes during human interaction with the objectives of a) understanding other people, b) understanding oneself, c) controlling one's own behaviour, and d) engaging with the social environment at the interface of oneself and others (Lieberman, 2007). This analysis of understanding other people originated in Europe and encompasses investigations into empathy and mentalising, as well as mirror neurons and other mental processes. However, the analysis of understanding oneself came from America and includes research on emotion regulation, self-reference and attitude processes (Lieberman, 2012).

The tools for understanding this interdisciplinary field of research are manifold and are mainly based on Functional Magnetic Resonance Imaging (fMRI), Positron Emission Tomography (PET), Electro Encephalo Graphy (EEG) and Magneto Encephalo Graphy (MEG) (Carter, 2009; Dimoka et al., 2007). They are described in further detail in Table 1 below.

Table 1: Functional Neuroimaging Techniques

Techniques	Explanation	Relevance
Functional Magnetic Resonance Imaging (fMRI)	*"A brain imaging technique in which magnetic resonance imaging is used to measure the changes in blood properties associated with neural activity".*	All these techniques can be used in marketing research to examine the neural basis of psychological processes, such as rewards, threats, trust, distrust, cooperation, competition, decision-making, uncertainty, risk, consumer behaviour and theory-of-mind, and to complement traditional methods and data such as surveys, interviews and focus groups.
Positron Emission Tomography (PET)	*"A functional imaging technique for measuring brain function in living subjects by detecting the location and concentration of small amounts of radioactive chemicals associated with specific neural activity".*	
Electro Encephalo Graphy (EEG)	*"A graphic record of the electrical activity of the brain which is made by attaching electrodes to the scalp that pick up the underlying brainwaves".*	
Magneto Encephalo Graphy (MEG)	*"A non-invasive functional brain imaging technique that is sensitive to rapid changes in brain activity. Recording devices (SQUIDS) measure small magnetic fluctuations associated with neural activity in the cortex and present these in visual form".*	

Source: adapted from Dimoka et al. (2007), Carter (2009, pp. 244, 245, 246, 247), Borum (2010) and Morin (2011)

By integrating these neuroimaging tools to investigate research problems, the metabolic activities or magnetic/electrical properties of the neurons in the consumer's brain are recorded. These functional neuroimaging techniques are divided into functional scanning and anatomical imaging techniques. Functional scanning provides information on how the brain works and anatomical imaging presents information on brain structures (Carter, 2009). Whereas fMRI and PET measure the change in cerebral blood flow, EEG and MEG measure the electromagnetic activity of the brain (Dimoka et al., 2007). Other complementary tools such as eye tracking, facial coding, facial electromyography and galvanic skin response register further psychological activities in the human body (Agarwal & Dutta, 2015).

Dimoka et al. (2007) state that brain data is a valuable supplement because it is direct, objective and reliable. Borum (2010) argued that most of the neurophysiology and neuroimaging techniques used in the study of interpersonal relationships and communications only provide a partial insight into the system as a whole. He believed that

traditional techniques such as surveys, interviews and focus groups in combination with neuroimaging techniques are still needed to address cognition and behaviour on a systematic level if we are to gain a deeper understanding of these processes. Nevertheless, the above-mentioned imaging techniques have contributed to the emergence of many new fields of research in previous years (Section 2.2). Social cognitive neuroscience has existed for almost two decades now. Compared to traditional relationship marketing, buyer-seller and salesperson-customer relationship research, which have been researched for more than six decades already, the newly developed functional neuroimaging techniques of social cognitive neuroscience allow for investigations into several regions of the brain and brain structures through specific stimuli arising in social situations. They also have the potential to complement traditional data (Page & Raymond, 2006).

Social situations could be affected with specific stimuli during social human interaction, depending on what the intentions of the social action are (Carter, 2009). For example, one can behave cooperatively or competitively in a social situation, which has different effects on one's counterpart, which in turn are associated with social experiences of the people involved (Van Doorn, Heerdink, & Van Kleef, 2012). Thus, different social situations can be created from human experiences. This potential to create social situations from experiences needs to be taken into account in future salesperson-customer relationship studies. However, recent studies in consumer marketing as well as relationship marketing integrate neurophysiological tools to provide salespeople with more insights into the decision-making process of their target customers, but not in relation to specific social situations (Van Doorn et al., 2012). These additional insights help salespeople to better understand their personal selling methods (Hsu, 2016). Furthermore, with these neurophysiological tools, there is the possibility that salespeople will reflect on their own behaviour during negotiations with their customers and better understand their own mental processes as a result. (Randolph et al., 2013).

The origin of the term social cognitive neuroscience has been explained and the main reasons for investigating the social, cognitive and neural level during human interactions have been discussed at the beginning of this section. It is necessary to reiterate that this doctorate is a salesperson-customer relationship study which applies the findings of social cognitive neuroscience to augment understanding of the development and maintenance of a long-term salesperson-customer relationship, and not a medical doctorate focused on conducting basic research into the brain, or the like. Moreover, a marketing researcher can ask himself, for example, what happens in specific brain areas when someone, in this case a customer, decides to start a personal relationship with a salesperson which may lead to the development of a long-term salesperson-customer relationship. In actual fact, the salesperson's personal selling style (Section 3.4.2.1) allows social situations to be created from customer experiences and therefore personalisation of the relationship between the salesperson and customer, which in turn fosters the development of long-term, loyal relationships (Randolph et al., 2013). Furthermore, the general question of whether social and cognitive factors are really sufficient enough to explain an increase in emotional bonding levels nowadays can also be raised. In light of the above discussion, it is clear that an

explanation of the neural level, such as biological brain factors, is also required to have a comprehensive understanding of how to develop and maintain interpersonal relationships in the B2B sector (Falcone & Castelfranchi, 2001).

Although the application of insights from the relatively new research field of social cognitive neuroscience seems very promising for salesperson-customer research (Randolph et al., 2013), it also faces several limitations such as reservations about data accuracy and limitations regarding neuroimaging technologies (Hammou et al., 2013; Mileti et al., 2016) (Sections 1.1 and 1.5). Researchers such as Barkin (2013) argue that the laboratory setup in which the neuroscientific experiments are carried out is artificial and that the findings could only be partially applied to the real world outside the laboratory. A neuroimaging system is extremely large and its environment is loud because of the imaging scanner. Study participants must live in this environment during the experiment, which may not be very comfortable (Hammou et al., 2013). Furthermore, since neuroimaging tools are quite expensive, the costs of the measurement time should also not be overlooked. Because of this, neuroscientific researchers usually only have one single neuroimaging device for their measurements at their disposal. In addition, they have limited time and samples, from which the results are subsequently evaluated in statistical terms (Fortunato et al., 2014). The processing and interpretation of this data is often based on statistical evaluations, which are very complex in their execution compared to data from interviews or focus groups (Kenning, Plassmann, & Ahlert, 2007). Meckl-Sloan (2015) and Daugherty and Hoffman (2017) highlighted the ethical controversy which is present within this research community. They argued that the participants' minds are manipulated during the execution of neuroimaging experiments. A summary of the possible limitations within the application of social cognitive neuroscience to market research is provided in Table 2.

Table 2: Limitations, Consequences and Opportunities of Social Cognitive Neuroscience

Limitations	Consequences	Opportunities
The development of high-cost, short neuroimaging experiments	- Limited sampling - Inadequate evaluation of neurophysiological variations	Employment of nanotechnology devices to measure emotional states and the customer's decision-making process in real time
The development of experiments confined to artificial laboratory environments	- Experimental distortion - Lack of understanding of subjects' emotional states	Use of unobtrusive and portable nanotechnology devices
The use of a single neuroimaging technology at a time, such as fMRI	- Incomplete map of brain functions - Over-interpretation of results	Application of multifunctional nanotechnology devices
The use of single non-neuroimaging devices	- Limited integration of neurological and physiological signals - Over-interpretation of results	Combination of laboratory experiments and daily life, miniaturised nanotechnology device tests
Moral, social, and ethical abuses of neuroimaging devices	- Limited protection of vulnerable populations - Manipulation of consumers' mind	Balancing of nanotechnology techniques with moral, social, and ethical requirements

Source: adapted from Mileti et al. (2016)

In addition to that, Mileti et al. (2016) suggested various ways to overcome neuroimaging limitations using nanotechnology devices.

Researchers such as Fortunato et al. (2014), Meckl-Sloan (2015) and Mileti et al. (2016) were concerned by the cost of neuroimaging experiments and the fact that there are only a limited number of samples available. Furthermore, they believed that experiments carried out in artificial laboratory environments have no connection with real life. In order to overcome these limitations and consequences, Mileti et al. (2016) suggested the use of nanotechnology devices. Nanotechnology devices are tools which are portable, miniaturised, non-intrusive and in most cases wireless. Thus, researchers are well aware of the limitations of neuroimaging experiments and their application, and they are already working on solutions to these limitations.

Despite these limitations, functional neuroimaging techniques have enabled researchers and practitioners to add a new dimension to their research. This allows them to better understand the customers' thinking and their unconscious mind during the decision-making process, which in turn has engendered relationship marketing and sales approaches (Hammou et al., 2013). Therefore, research with this emergent technology must continue to enrich academia, to allow more profound managerial implications and to identify promising new directions for future research (Plassmann et al., 2015) (Sections 8.5 and 8.6).

2.2.2 Classification of the Human Brain and its Social Cognition Processes

There is more than one system in our brain which allows people to develop a relationship with other people (Zak, 2007). The human brain is responsible for specialised human behaviour and human decision-making, so it is important for consumer and relationship marketing researchers to collaborate with neuroscientists when investigating interpersonal relationships such as the one between a salesperson and a customer. This will allow them to learn more about it and how its processes (Agarwal & Dutta, 2015). By examining interpersonal relationships from a neural perspective, consumer and relationship marketing researchers hope to gain further insights into the decision-making processes of their target customers (Borum, 2010). Their approach analyses the human brain and examines the associated genes and the endocrine glands, with the latter being responsible for the release of specific hormones (Riedl & Javor, 2012). The influence of the human brain forms the focal point of the research of consumer and relationship marketers, with genetic research and endocrinology featuring as an aside.

Therefore, a deeper understanding of the classification of the human brain and its social cognition processes is necessary to be able to explore the nature and importance of social domains of experience, which have the potential to produce interpersonal reward situations in the customer's brain. The brain not only processes and stores information but also generates emotions, perceptions and thoughts which control human behaviour and human decision-making (Donoghue, 2015; Heinrichs, von Dawans, & Domes, 2009). Furthermore, it

co-ordinates and performs actions and, finally, it is responsible for the conscious awareness of the mind (Carter, 2009).

Emotions, perceptions and thoughts are significant reasons why people make conscious decisions in general (Ćosić, 2016) and how customers make conscious purchase decisions in particular (Randolph et al., 2013). There are only three salesperson-customer relationship studies on the workings of the human brain and its unconscious processes: Ćosić (2016), Hsu (2016), and Varshney (2016). Therefore, discussion of the fundamental properties of the human brain will increase the researcher's as well as the salesperson's understanding of the human reward system (Section 2.2.3), and its related rewards or threat responses (Section 2.2.4). Secondly, although existing salesperson-customer relationship studies have included the right (emotional) and left (analytical) hemispheres and their tasks (Wilson, Gaines, & Hill, 2008), they do not address the details of the automatic and controlled social cognition systems. This is why it is important to recognise and to incorporate the human brain and its automated and controlled social cognition processes into future studies.

The human brain is divided into two hemispheres and four lobes (Figure 3). The frontal, the parietal, the occipital and the temporal lobes have to fulfil different tasks and specific functions (Dimoka et al., 2007).

Figure 3: Classification of the Human Brain (Redacted for copyright reasons)

Source: Carter (2009)

These tasks and functions are central to the development of a long-term salesperson-customer relationship because conscious and unconscious, verbal and non-verbal stimuli are sent from one person to the other, which activates the logical as well as the emotional brain (Carter, 2009).

The *frontal lobe* is the largest of the brain's lobes and is placed at the front of each cerebral hemisphere. The frontal lobe is situated in front of the parietal lobe above the temporal lobe (Carter, 2009). The main tasks of the frontal lobes include: creative and logical thinking, the ability to judge, problem-solving and social isolation. The frontal lobe assists in procedures such as planning, coordinating, controlling and executing behaviour. Furthermore, it is involved in language, memory, impulse control, motor function and skills (Dimoka et al., 2007). The *parietal lobe* is positioned behind the frontal lobe and integrates sensory information (Carter, 2009), which stems mainly from touch, taste, pain, and temperature (Dimoka et al., 2007). The *occipital lobe* is situated at the back of the brain and processes

visual information. Signals from the primary visual cortex are analysed by shape and colour in the occipital lobe (Carter, 2009). This part of the brain is generally responsible for interpreting visual stimuli, processing visual information and recognising objects (Dimoka et al., 2007). The *temporal lobe* is located in the centre of the brain, under the parietal lobe. Knowledge of all the senses is recognised in this part and is combined with the emotional tone (Carter, 2009). The temporal lobe is responsible for hearing, memory and meaning. It is involved in emotion, perception, recognition and learning, and is divided into two lobes. The right temporal lobe represents the visual memory, whereas the left temporal lobe represents the verbal memory (Dimoka et al., 2007). While the parietal, occipital and temporal lobes are largely responsible for automatic processes (unplanned), the frontal lobe mainly engages in controlled activities (planned) that require thought (Dimoka et al., 2007).

These four lobes are connected with neural networks and synapses, and react as a whole to external and internal stimuli (Carter, 2009). It is precisely the interactions between these automatic and controlled processes and the external and internal stimuli that play a central role in the salesperson-customer relationship and the further development of a long-term salesperson-customer relationship. Coleman (2008) stated that the human brain is a social organ and therefore inevitably forms a close connection with the brain of every other person it meets. Thus, this neural bridge would allow the salesperson's brain to influence that of the customer. The more a person feels emotionally connected to another person, the stronger the mutual neural influence is (Coleman, 2008).

Neuroscientists are currently investigating how the brain works and marketing researchers are applying the findings in this area to understand how highly specialised human behaviour and human decision-making patterns emerge from the black box of the customer's brain (Donoghue, 2015). Functional neuroimaging techniques and neurophysiological tools (Section 2.2.1) contribute to our understanding of the human brain and its processes (Gorgiev & Dimitriadis, 2015). The key outcome is that many new insights about the neural processes in the human brain have been uncovered and incorporated into consumer marketing and behavioural studies. This means that it is not enough to simply discuss consumer and relationship marketing without incorporating the latest neurological findings; otherwise, this can lead to an error in judgment between the interacting parties (Dimoka, 2010; Poore et al., 2012).

The existing literature on long-term salesperson-customer relationships shows what salespeople do to establish, develop and maintain long-term salesperson-customer relationships with specific relationship antecedents, and what the consequences are (Boles, Brashear, Bellenger, & Barksdale Jr, 2000; Boles, Johnson, & Barksdale, 2000; Ingram et al., 2008). However, these studies do not use the latest neurological findings from the human brain and they do not incorporate the automated and controlled social cognition processes into their studies. Thus, these studies are inadequate and may be incomplete in their outcome. Hence, a salesperson must consciously, and not as is often described, unconsciously or intuitively, attempt to produce an emotional bond with the customer. If he is to explore the unconscious mental state of the customer, he requires a basic understanding of the automatic and controlled processes in the brain (Lieberman, 2007).

Traditional consumer marketing methods try to measure the customer's behaviour towards specific features, such as brands which may not reflect the actual behaviour at the point of purchase (Agarwal & Dutta, 2015). The same or similar methods are applied when it comes to long-term and loyal salesperson-customer relationships (Hsu, 2016). These traditional methods do not take into account that most of the human brain processes function unconsciously, which means automatically and without the awareness of the mind. Researchers such as Zurawicki (2010) claim that more than 90% of all information is processed automatically in the human brain. Thus, it is important that both automatic and controlled social cognition processes are incorporated into the development of future methods, because automatic processes are key to improving researchers' understanding of how customers make decisions (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). Automatic processes are spontaneous and unintentional, whereas controlled processes are associated with executive functions such as awareness, effort and reasoning (Wegner & Bargh, 1998). A comparison between the two processes is provided in Table 3 below.

Table 3: Automatic and Controlled Social Cognition System

Automatic Social Cognition System	Controlled Social Cognition System
Reflexive system (x-system) [Source 1] Bottom-up [Source 2] Low road [Source 3] Emotional process [Source 4]	Reflective system (c-system) [Source 1] Top-down [Source 2] High road [Source 3] Higher cognitive process [Source 4]
More emotional responses	More logical responses
Fast operation/slow learning	Slow operation/fast learning
Spontaneous processes	Intentional processes
Parallel processing	Serial processing
Non-relative to cognitive load	Relative to cognitive load
More sensory driven	More linguistically driven
Normally reality experienced	Normally self-generated experienced

Source: adapted from 1) Lieberman (2007); Lieberman, Gaunt, Gilbert, and Trope (2002); Satpute and Lieberman (2006) 2) Ochsner et al. (2009) 3) Goleman (2006) 4) Dimoka et al. (2007)

Dual-process frameworks like the above have been proposed in almost all domains of social psychology (Bargh, 1999; Chaiken & Trope, 1999) to obtain a simpler representation of the social processes in the human brain and to better organise the general principles of social cognitive neuroscience (Lieberman, 2007). Dual-process framework representation aims to bridge the gap between the many existing behavioural studies and the neural system (Satpute & Lieberman, 2006). The x-system is the reflexive, automatic social cognition system, while the c-system is the reflective, controlled social cognition system (Lieberman et al., 2002; Satpute & Lieberman, 2006).

The differences in the responses are important in the context of this research study. While the responses in the x-system are more emotional in nature, those in the c-system are more logical. There is also an essential difference between the processes. The emotional processes are more spontaneous and unconscious; however, the logical processes are distinctly intentional and conscious. The automatic social cognition system processes information

parallel to the aforementioned and it is non-relative to the cognitive load, which means it does not need working memory capacity, is more sensory-driven und is normally experienced via the human senses. Thus, the intentions to purchase, repurchase and recommend fall under the category of reflective and cognitive processes, yet they are influenced by the automatic (reflexive) cognitive system (Lieberman, 2007). This comparison of the automatic and controlled social cognition systems shows that unconscious and emotional processes clearly have an effect on a customer's decision to manifest cooperative, loyal and referral behaviour.

The automatic social cognition system is associated with the following neural regions: a) the amygdala, b) the basal ganglia, c) the ventromedial prefrontal cortex, d) the lateral temporal cortex, and e) the dorsal anterior cingulate cortex. The controlled social cognition system is connected to the following neural regions: f) the lateral prefrontal cortex, g) the medial prefrontal cortex, h) the lateral parietal cortex, i) the medial parietal cortex, j) the medial temporal lobe, k) the rostral anterior cingulate cortex, and l) the dorsomedial prefrontal cortex (Lieberman, 2007) (Figure 4).

Figure 4: Brain Areas of the Automatic and Controlled Social Cognition System
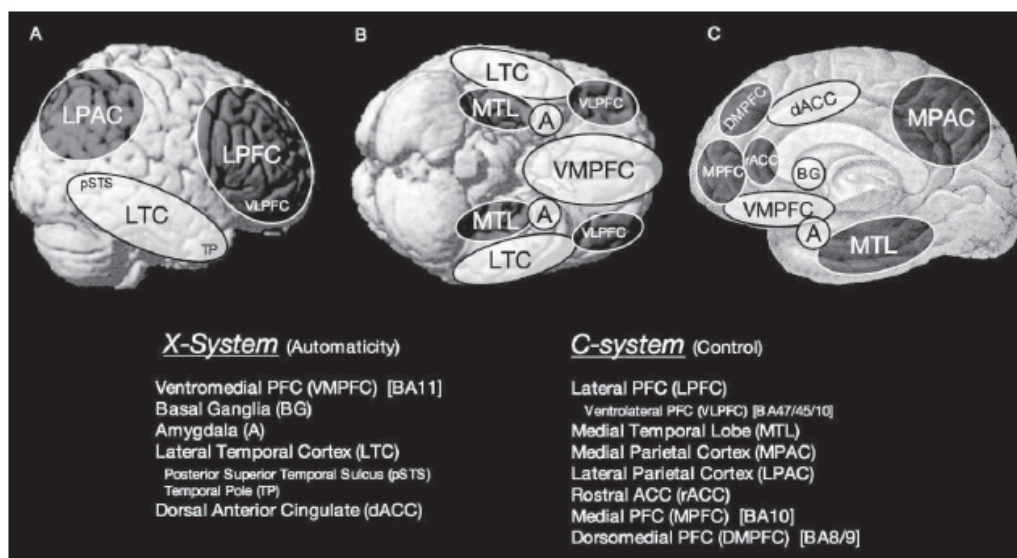
Hypothesized neural correlates of the C-system supporting reflective social cognition (analogous to controlled processing) and the X-system supporting reflexive social cognition (analogous to automatic processing) displayed on a canonical brain rendering from (A) lateral, (B) ventral, and (C) medial views. Note: the basal ganglia and amygdala are subcortical structures that are displayed here on the cortical surface for ease of presentation.

Source: Lieberman (2007, p. 262)

Dimoka et al. (2007) distinguish between two major brain areas which are responsible for individual and social perception, attention, cognition, emotion, memory, executive functioning and decision-making. One area is the prefrontal cortex, which executes higher cognitive processes, and the other is the limbic system, which processes emotional information (Dimoka et al., 2007). The prefrontal cortex is the anterior part of the frontal lobe (Carter, 2009) and is divided into the dorsolateral (upper part), ventromedial (lower middle), medial (middle), and orbitofrontal (above the eyes) cortices (Dimoka et al., 2007). The limbic system is surrounded by an area which is known as the limbic lobe. This limbic

lobe is adjacent to the inner sides of the temporal, parietal and frontal lobes (Carter, 2009). The limbic system consists of the major regions of the amygdala, cingulate cortex, nucleus accumbens and the hippocampus (Dimoka et al., 2007).

Figure 4 illustrates the prefrontal cortex and the limbic system from a different angle than that in Figure 5. The latter shows the brain regions of the automatic and controlled social cognition system.

Figure 5: Major Brain Areas of the Prefrontal Cortex and Limbic System
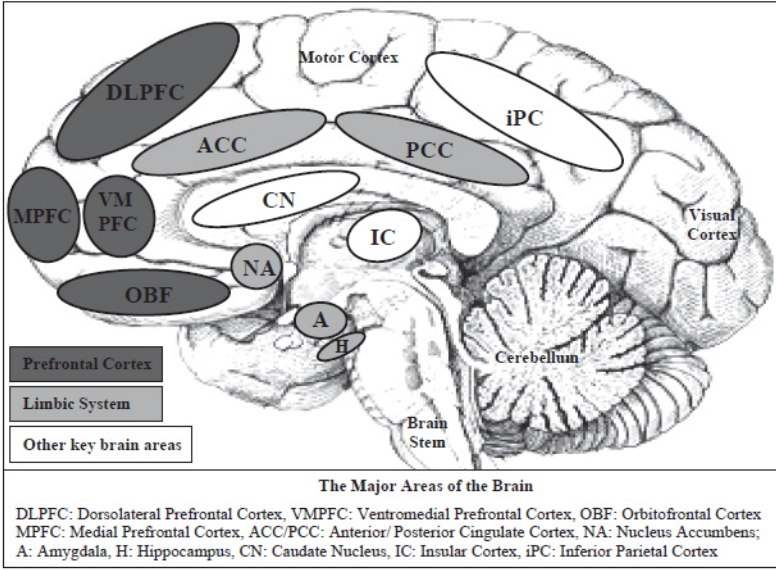
DLPFC: Dorsolateral Prefrontal Cortex, VMPFC: Ventromedial Prefrontal Cortex, OBF: Orbitofrontal Cortex
MPFC: Medial Prefrontal Cortex, ACC/PCC: Anterior/ Posterior Cingulate Cortex, NA: Nucleus Accumbens;
A: Amygdala, H: Hippocampus, CN: Caudate Nucleus, IC: Insular Cortex, iPC: Inferior Parietal Cortex

Source: Dimoka et al. (2007, p. 4)

In light of the above information on the major areas in the human brain, it seems that the limbic system is associated with the automatic social cognition system and that the prefrontal cortex is related to the controlled social cognition system (Dimoka et al., 2007; Lieberman, 2007). The automatic and the controlled social cognition systems are both part of the human reward system (Section 2.2.3), and are therefore crucial for an augmented understanding of salesperson-customer interactions.

Since brain research is currently at a very early stage and has not been fully investigated, brain and marketing researchers are conducting intensive studies into the mechanism of the prefrontal cortex and limbic system brain areas and how the latter interact with each other. As mentioned before, brain researchers believe that more than 90% of the information which reaches the human brain is processed automatically and without the conscious awareness of the human mind (Zurawicki, 2010) (Section 1.2). This phenomenon also takes place in the customer's mind during the sales-relevant communication and information exchange with the salesperson. The next section will shed light on the human reward system with its automatic and controlled social cognition systems and the significance of neurotransmitters.

2.2.3 Human Reward System and the Significance of Neurotransmitters

The human reward system is a set of brain networks and synapses which has the potential to produce a reward and subsequently a sense of satisfaction if personal preferences are met.

Dopamine is the main neurotransmitter which drives the human reward system (Carter, 2009; W. Schultz, 2000; Schultz, 2006; Schultz, Dayan, & Montague, 1997). Neurotransmitter molecules are biochemical substances which pass stimuli from one nerve cell to another (Carter, 2009). W. Schultz (2000) reported on the fundamental neurological importance of rewards and neurotransmitters before the new research field of social cognitive neuroscience was introduced by Ochsner and Lieberman (2001). Schultz's (2000) approach was based on the fields of social cognition and cognitive neuroscience, which together form the research field of social cognitive neuroscience (Ochsner & Lieberman, 2001). This means that the human reward system was known in neurophysiology much earlier than in the consumer behaviour field, and has already been investigated in depth in behavioural studies. However, at that time, it did not include the latest developments of functional neuroimaging techniques (Section 2.2.1), which allow investigations into several regions of the brain and their processes (Section 2.2.2) (Page & Raymond, 2006). Thus, consumer behaviour and in particular salesperson-customer relationship studies have not yet incorporated the full knowledge of neurophysiological approaches. This constitutes a gap in salesperson-customer relationship research studies and also a lack of knowledge on how positive reinforcement can arise from social situations in buyer-seller and salesperson-customer interactions (Hsu, 2016; O'Connell et al., 2011; Randolph et al., 2013).

A pre-neuroscience study conducted by W. Schultz (2000) referred to rewards as *"positive reinforcers"* and stated that they operate multifunctionally (W. Schultz, 2000, p. 199). W. Schultz (2000) assumed that there are two different levels of rewards. He spoke of *"basic rewards"* und *"higher rewards"* (W. Schultz, 2000, p. 205). The basic rewards satisfy the vegetative nervous system (W. Schultz, 2000). They are also called primary rewards and are generated through food, sexual exchange or the like (Carter, 2009; Ikemoto, 2007). The higher rewards, also termed cognitive rewards, are generated by money, novelty, beauty, challenge, power, acclaim, security and territory (W. Schultz, 2000), just to mention a few. Lieberman and Eisenberger (2009) called cognitive rewards social pleasures, which are formed in social situations. In their paper on social pains and social pleasures, Lieberman and Eisenberger (2009) concluded that social rewards may be just as pleasant as financial rewards, and that social pains can be as hurtful as physical pain. Furthermore, they argued that everyone wishes to maximise positive and minimise negative feelings. Therefore, cognitive rewards rather than basic rewards should be explored for the study of long-term salesperson-customer relationships. The main objective of salesperson-customer relationships is to generate revenue for the seller and economic benefits for the buyer company. During the establishment, development and maintenance of a long-term salesperson-customer relationship, the added value for the customer must be always apparent (Palmatier, 2008). Thus, interpersonal reward situations add the requisite value during these stages because they have the potential to maximise positive feelings, which are as pleasant as financial rewards (Lieberman & Eisenberger, 2009).

Carter (2009) described the human reward system in the context of desire and pleasure. She argued that the feeling of desiring and the fulfillment of these desires lead to pleasure, enjoyment or satisfaction. Pleasure is viewed as rewarding and desire is strongly related to personal preferences. In a study of desirability (desirable, indifferent or undesirable), it was found that three different brain areas are addressed. These are the superior orbito-frontal, the mid-cingulate and the anterior cingulate cortices (Kawabata & Zeki, 2008). The ventral tegmental area, nucleus accumbens and prefrontal cortex are involved in a reward situation (Carter, 2009). Dopamine is produced in the ventral tegmental area and is triggered in the nucleus accumbens before a reward situation in the prefrontal cortex occurs (Ikemoto, 2007). It therefore seems that the human reward system is activated and the same automatic and controlled brain areas operate when someone expresses and fulfils his personal preferences and desires. Taking the aforementioned into consideration, the reward situation is a conscious experience of pleasure resulting from the activation of the human reward system (Figure 6).

Figure 6: The Human Reward System
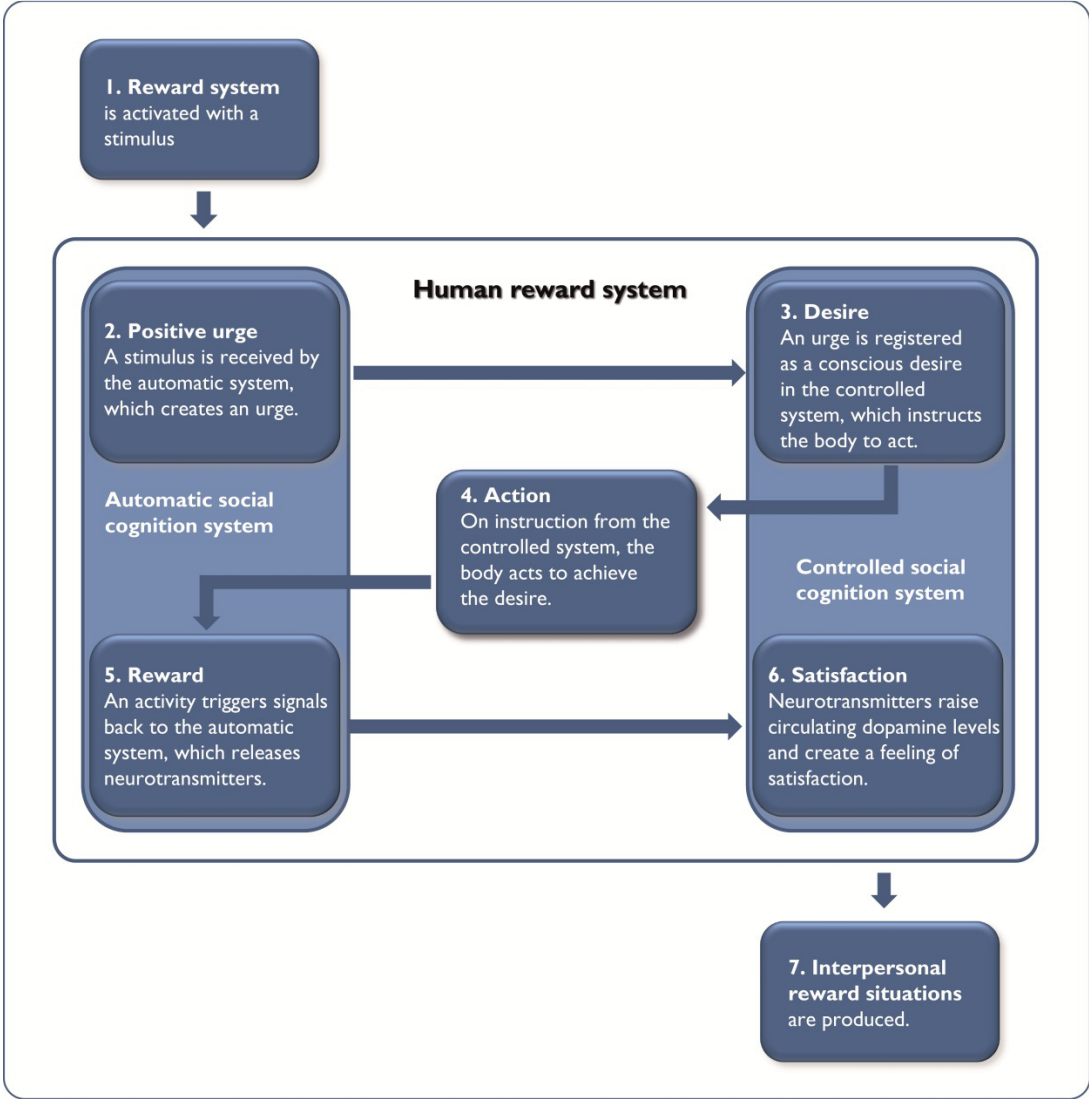
Source: adapted from Carter (2009)

The human reward system can be explained as follows: an external or internal stimuli is registered in the limbic system (automatic social cognition system) (Carter, 2009). This creates an urge, which causes a conscious desire in the pre-frontal cortex (controlled social cognition system). This desire instructs the body to perform an action, which triggers signals back to the limbic system, and in turn releases neurotransmitters and creates a situation of satisfaction. The activity which triggers these signals is considered to be a reward situation. Within the limbic system, the amygdala is responsible for positive and negative emotions in verbal stimuli (Hamann & Mao, 2002) as well as for anger, jealousy, distrust, negative emotions, pleasure and fear (LeDoux, 2003). This means that both rewarding and threatening situations may result from the human reward system that is activated by the salesperson's cognitive performance. Threatening situations must be avoided at all costs as they have a negative effect on the development of a long-term salesperson-customer relationship.

The associated production of neurotransmitters is crucial when a salesperson attempts to maximise positive feelings in a customer's mind. As mentioned at the beginning of Section 2.2.3, dopamine is the main neurotransmitter which drives the human reward system (Carter, 2009; W. Schultz, 2000; Schultz, 2006; Schultz et al., 1997). Researchers have found that the higher the dopamine level is, the more pleasure occurs and the more an action is repeated in the future (Carter, 2009). Therefore, one of the salesperson's main goals must be to ensure that his customers experience as many reward situations as possible, thus facilitating the occurrence of pleasurable situations and consequently raising the dopamine level (albeit unconsciously), which creates a feeling of satisfaction.

In addition to having reward and threat functions, dopamine has many other functions in various areas of the human brain (Carter, 2009). Borum (2010), who investigated interpersonal trust, explained that threat situations often arise through faith or feelings when people act against expectations, interests or both. In contrast, reward situations occur when an individual's positive expectations about the behaviour of others are met. Thus, dopamine has a distinctive physiological character in decision-making, especially when people decide to trust someone. Dopamine assists in the learning of trust experiences and in evaluating whether others are trustworthy or not (Borum, 2010). Consequently, trust is undeniably a part of successful salesperson-customer relationships.

Like dopamine, the neuropeptide oxytocin (Shahrokh, 2012; Zak, 2011) also influences a person's social behaviour (Heinrichs et al., 2009) and is responsible for human trust behaviour in particular (Riedl & Javor, 2012). Neuropeptides are small protein-like molecules that neurons use to communicate with each other (Carter, 2009). Oxytocin itself is produced in the hypothalamus and creates a pleasant feeling, promotes interpersonal bonds and plays a central role in emotions, unconscious behaviour, instincts and automatic control of body processes and systems (Carter, 2009). Emotions, unconscious behaviour, instincts and automatic control are precisely the factors which must be included in the explanation of the development of a long-term salesperson-customer relationship, because a deeper understanding of these factors will improve a salesperson's knowledge of how a customer makes his purchase decision. Hence, if these factors are not included in a salesperson-

customer relationship, it could be argued that the salesperson has insufficient knowledge to integrate the human brain and its unconscious processes into his sales approach.

Kosfeld, Heinrichs, Zak, Fischbacher, and Fehr (2005) confirmed that oxytocin increases trust and interpersonal relationships. Empathy (theory-of-mind) was implemented in a test procedure and the affective mental state was tested with the 'Reading the Mind in the Eyes Test' (RMET) after intranasal administration of oxytocin (Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001). This study further concluded that oxytocin has an effect on mentalising (Riedl & Javor, 2012), generosity and reciprocity (Kosfeld et al., 2005). Interestingly, empathy, mentalising, generosity and reciprocity are concepts which have all been investigated in buyer-seller and salesperson-customer relationships for some time now (Ahearne et al., 2007; Peters, Covello, & McCallum, 1997).

Arginine vasopressin is a neuropeptide hormone closely associated with oxytocin (Carter, 2009) which strongly influences human behaviour and the social cognition system (Heinrichs et al., 2009). In contrast to oxytocin, which reduces behavioural and neuroendocrine responses to social stress, arginine vasopressin primarily affects male social behaviours such as aggression and pair-bonding, and has an anxiogenic effect (Heinrichs & Domes, 2008). Borum (2010) concluded that arginine vasopressin is generally associated with increased alertness, anxiety, arousal and activation. Riedl and Javor (2012) postulated that arginine vasopressin is more likely to be associated with distrust (and oxytocin with trust), which could potentially generate threatening situations in the customer's brain.

Serotonin also belongs to the same neurotransmitter group as dopamine (Carter, 2009). Serotonin is mainly produced in the raphe nuclei and has certain cognitive functions such as eliciting experiences from the memory or experiencing learning activities (Riedl & Javor, 2012). The raphe nuclei are a group of nuclei in the central nervous system which are distributed over the entire brainstem (Carter, 2009). They are associated with social status (Riedl & Javor, 2012), impulsive aggression and emotion control in particular, which are related to unfairness (Crockett, Clark, Tabibnia, Lieberman, & Robbins, 2008). Unfairness is a crucial factor in emotion regulation (Crockett et al., 2008). Therefore, the concept of fairness is an integral part in the development of a long-term salesperson-customer relationship. The research community has tabled evidence in the form of results, e.g. '*The Ultimatum Game*' by Güth, Schmittberger, and Schwarze (1982), that people are willing to potentially lose face and react if someone violates social norms and exhibits unfair behaviour in a cooperative environment. In such a situation, increased activity in the ventral and dorsal striatum was found (Crockett et al., 2013). This suggests that fairness in a cooperative environment is influenced by the neurotransmitter serotonin. In the past, fair behaviour was found to be an integral part of the development of a long-term salesperson-customer relationship because it leads to trust and trustworthy situations (Renn & Levine, 1991). This means that the serotonin level can affect the development of a long-term salesperson-customer relationship.

The aforementioned discussion suggests that social status as well as fairness have a significant influence on the development of a successful salesperson-customer relationship. Fairness and cooperation have both been studied in neuroscience and salesperson-customer relationships for some time now (Tabibnia & Lieberman, 2007). However, the individual's social status also has to be included in future salesperson-customer discussions and investigations. This is supported by the results from a research study by Muscatell et al. (2012), in which a link between social status and people's perceptions of the social world was made, and a connection between social status and mentalising activities was found. It is still not clear what kind of influence social status has on the development of a long-term salesperson-customer relationship, though.

In conclusion, there are several lessons that can be learnt from social cognitive neuroscience which can be incorporated into investigations of long-term salesperson-customer relationships. Firstly, there is the fundamental principle of the human reward system and the related maximisation of rewarding and minimising of threatening situations which drive human motivation (Gordon, 2000). This could be generalised to include a long-term salesperson-customer relationship because rewarding situations influence the customer's decision-making process (Fugate, 2008) and also increase the level of trust between the salesperson and the customer (Borum, 2010; Parasuraman, Berry & Zeithami, 1991). Thus, a salesperson is responsible for maximising the production of rewarding situations in the customer's mind.

Secondly, there are several social domains of experience which are related to the human reward system, i.e. automated and controlled brain networks and synapses, to maximise positive and minimise negative feelings (Lieberman & Eisenberger, 2009). For a successful salesperson-customer relationship, this means that the salesperson is responsible for maximising rewarding situations in the customer's brain. Rock (2011) included these two principles in his leadership study. He defined social domains and explained the potential of having rewarding or threating situations if these social domains are positively or negatively stimulated. Furthermore, he concluded that these conditions can be applied to any other situation which involves different forms of human collaboration. This strengthens the argument that these two principles can be explored and also applied to long-term salesperson-customer relationships.

Thirdly, when trust is honoured with collaboration, the human brain counts this as a rewarding situation; hence, rewarding actions are repeated in the future, thereby increasing the level of trust (Borum, 2010). This means rewarding actions in salesperson-customer interactions contribute to customer trust in a salesperson, and that trust is a part of a long-term salesperson-customer relationship.

2.2.4 Interpersonal Reward Situations in the Human Brain

High-quality interpersonal relationships are strong connections between two interacting and cooperative human beings (Iacobucci & Ostrom, 1996). Some interpersonal relationships are

based on reliable, fair and non-opportunistic behaviour by the interacting partners, and they are built as part of the social and cultural influences (Cullen, Johnson, & Sakano, 2000). However, in this context, the biological influences on interpersonal relationships cannot be overlooked. As discussed in Section 2.2.3, rewarding actions also influence the interpersonal relationship between a salesperson and a customer. Goodwin and Gremler (1996) discovered that interpersonal relationships are important because some of them have a long-term character and they provide social and trusting benefits such as loyalty in consumer service. Although the influence of interpersonal relationships on building customer relationships in service-related fields has been widely investigated in the past (Bove & Johnson, 2001), very few studies have been conducted on how interpersonal relationships are built in the sales of complex and customised products (Guenzi & Georges, 2010). Moreover, none of these interpersonal relationship studies included the human reward system and potential resulting interpersonal rewards in the development of a long-term salesperson-customer relationship in the B2B sector. They also did not add any neuroscientific value to the existing traditional concepts. Therefore, it is particularly important to understand how interpersonal reward situations can be produced in the customer's brain.

Interestingly, about two decades ago, W. Schultz (2000) assumed that the goal of rewards was probably to influence consumer behaviour. About ten years later, it was confirmed that the human reward system (Section 2.2.3) is an integral feature that influences consumer behaviour and the development of interpersonal relationships (Poore et al., 2012) in both B2C and B2B. As already discussed in Section 2.2.3, if the human reward system is to take action, it needs specific stimuli to activate its underlying brain structures (Page & Raymond, 2006). In the context of a salesperson-customer relationship, the salesperson is given the role of generating specific triggers through social domains of experience which may activate the human reward system. Hence, the salesperson's cognitive competence could influence the reward system of a customer, thereby potentially activating the limbic system, which is associated with the automatic social cognition system; and the prefrontal cortex, which is related to the controlled social cognition system (Dimoka et al., 2007; Lieberman, 2007). Viewed at the onset of an interpersonal relationship and as it develops over time, such interpersonal reward situations could be considered to be positive interactions over a specific time period and thus crucial to all interpersonal relationships (Weber, Malhotra, & Murnighan, 2005).

To reiterate, in strong interpersonal relationships, the customer feels connected to the salesperson and thereby shows cooperative behaviour leading to purchases (Section 3.3.2.1), loyal behaviour leading to repurchases (Section 3.3.2.2), and positive WOM leading to new customers (Palmatier, 2008) (Section 3.3.2.3). Such behaviours like the afore-mentioned contribute to the development of a high-quality relationship. These dependencies will be discussed in detail in Chapter 3.

In high-quality interpersonal relationships, the decisive factors may be social rewards like verbal recognition (Kirsch et al., 2003), altruistic behaviour (Hare, Camerer, Knoepfle, & Rangel, 2010) or gains in social status (Muscatell et al., 2012). It is also becoming clearer that

the concepts of empathy, mentalising, intuition, emotion control, generosity and reciprocity (Section 2.2.3) are dependent on the salesperson's cognitive performance. As a result of this cognitive behaviour, the customer feels closer to the salesperson because people have more confidence in people with similar dispositions (de Vignemont & Singer, 2006; Swan et al., 1999). Therefore, it can be argued that the production of interpersonal reward situations within the customer's brain is decisive for an interpersonal relationship.

If a salesperson is unaware of the importance of interpersonal rewards and interpersonal threat situations which could unconsciously occur in the customer's brain, he will not be as successful as a salesperson who is aware of these signals and knows how to influence a customer's state of mind (Dietvorst et al., 2009). Figure 7 below illustrates the focus of the study and the human reward system. Therefore, a salesperson must be aware of them and also know whether a reward or a threat situation occurs consciously and unconsciously within the customer's mind to successfully develop long-term salesperson-customer relationships. As a consequence of this awareness, the black box of the customer's mind can now be explored further in more detail.

The research gap stems from not integrating the salesperson's cognitive performance, social domains of experience, human reward system and possible interpersonal reward situations into the development of a long-term salesperson customer relationship. In other words, the relationship between the social domains of experience and interpersonal reward situations has still not been investigated in connection with the salesperson's cognitive performance in the B2B sector.

After discussing the importance of neurological principles for relationship marketing (Section 2.2), the challenge now lies in eliciting social domains of experience in the brain (Chiao, Bordeaux, & Ambady, 2004; Spear, 2000), which could be influenced by a salesperson's cognitive abilities and thereby potentially activate the customer's reward system. These social domains of experience could also potentially influence the customer's unconscious mind (Falcone & Castelfranchi, 2001; Rousseau, Sitkin, Burt, & Camerer, 1998). Furthermore, when these social domains are triggered by the salesperson's cognitive performance, rewarding and non-threating situations could be created in the customer's brain.

It seems to be the salesperson's role to positively influence these social domains of experience so that interpersonal reward situations could be produced which would have a positive impact on the development of a long-term salesperson-customer relationship. When incorporating these findings from social cognitive neuroscience, such as the human reward system and the production of interpersonal reward situations within salesperson-customer relationships, a new dimension could be generated. If this were the case, it would lead to a general rethink of long-term salesperson-customer relationships and would open the door for further research in the field, in particular within the topic of salesperson-customer interactions.

This new research field of social cognitive neuroscience promises to be a ground-breaking addition to the traditional behavioural and self-reported statement methods (Dimoka et al., 2007). In order to do his job effectively, a salesperson must understand and interpret the customer's mental states and processes (Dietvorst et al., 2009) and be able to activate the human reward system so that interpersonal reward situations can occur in the customer's brain.

Figure 7: Focus of the Study and Human Reward System
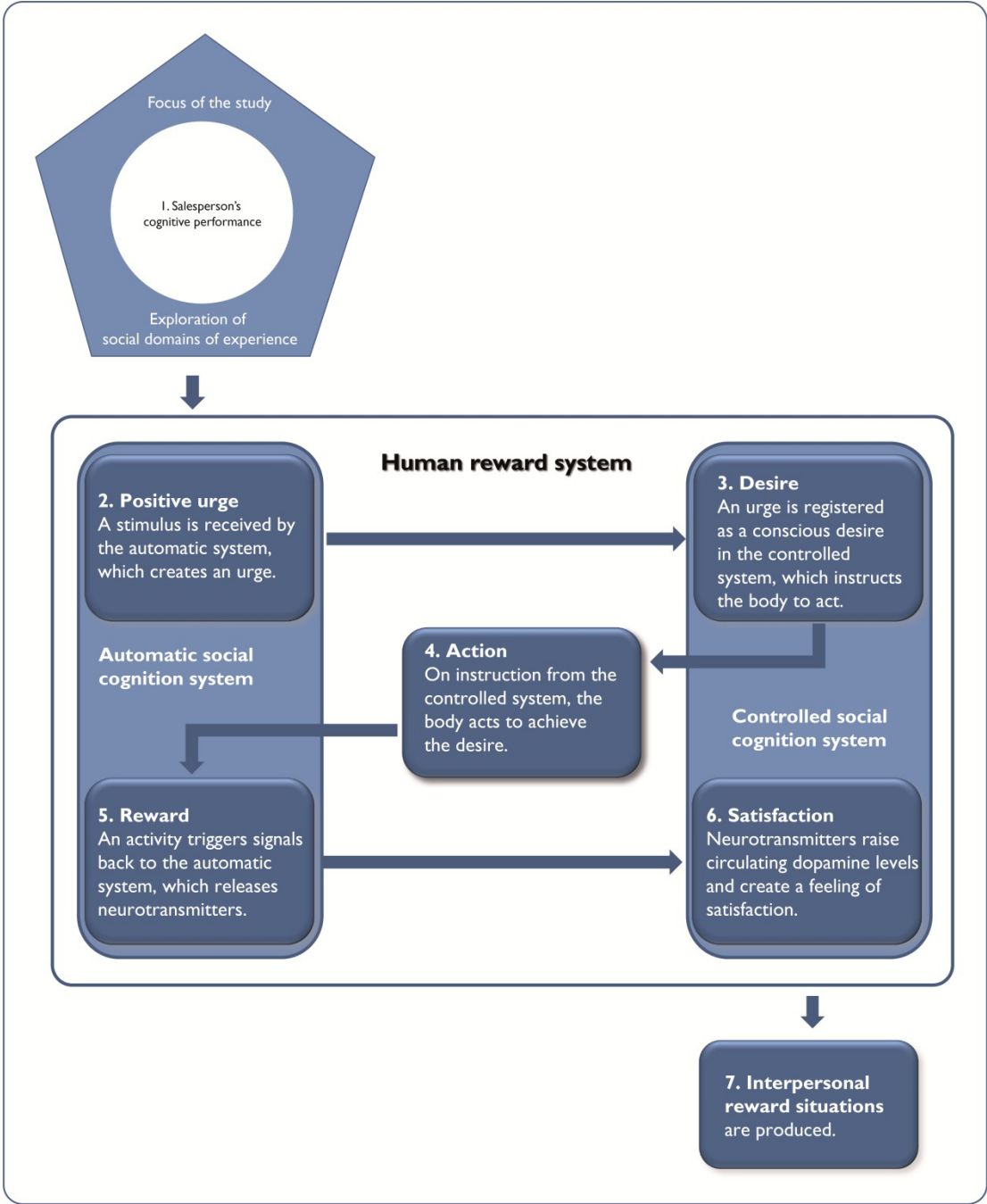
Source: Author

Furthermore, interpersonal reward situations incur in social situations where pleasurable activities are constructed consciously or unconsciously. In the context of a salesperson-customer relationship, this means that the salesperson's cognitive performance must be aligned in such a way that the customer unconsciously perceives a rewarding situation, which leads to a conscious sense of satisfaction and therefore to an interpersonal reward situation in his brain.

In conclusion, interpersonal relationships are dynamic constructs which change continuously (Section 3.3.1). Some of them develop over time and some of them never develop into high-quality relationships. During the development time, mutual trust is necessary to ensure that a successful interpersonal relationship can emerge if a long-term salesperson-customer relationship is to have any chance of developing (Petermann, 2013; Swan et al., 1999). A study conducted by Borum (2010) on interpersonal relationships not only included trust, cooperation and the resulting rewarding situations but also the newest findings from neuroscience. It found that when trust is honoured with collaboration, the human brain counts this as a rewarding situation (Section 2.2.3). Consequently, rewarding actions are likely be repeated in future transactions, thereby increasing the bandwidth of trust. This means that rewarding situations and cooperation are closely interrelated. It further means that interpersonal reward situations and positive interactions over time (Weber et al., 2005) may follow a similar line. This is supported by Poore et al. (2012), who stated that the reward system has a significant impact on trust, bond security and behavioural strategies. Therefore, the concept of trust (Section 3.3.1.1) and the trust-building process (Section 3.4.2) will be described in more detail in Chapter 3, which explores the nature of a long-term salesperson-customer relationship.

2.2.5   Salesperson's Cognitive Performance in Buyer-Seller Relationships

Sections 2.2.3 and 2.2.4 explained how the human reward system works and how interpersonal reward situations can occur when the human reward system is activated. From this discussion, the focus was further defined and the links between the social domains of experience and the human reward system were explained (Figure 7). During this extensive literature review, three interesting facts emerged which have the potential to influence the development stages of a of long-term salesperson-customer relationship.

Firstly, the salesperson is responsible for maximising pleasure and for minimising threatening situations on the customer's side. As a consequence, the human reward system is activated, which drives human motivation (Gordon, 2000); in this context, it should drive the customer to purchase and repurchase intentions and to positive WOM (Chapter 3).

Secondly, the salesperson, with his cognitive abilities, must be able to activate the human reward system in such a way that this causes interpersonal reward situations in the customer's brain. These reward situations may occur if the salesperson is able to positively address the social domains of experience in such a way that the automatic social cognition system is activated. This automatic part is related to the human reward system. The goal of

this endeavour is to maximise positive and minimise negative feelings (Lieberman & Eisenberger, 2009).

Thirdly, the salesperson must understand the customer's mental processes and align his cognitive performance in such a way that the customer unconsciously perceives a rewarding situation, which then may lead to a conscious sense of satisfaction. Whether this happens or not depends on the salesperson understanding and interpreting the customer's mind in order to adjust his personal selling style (Dietvorst et al., 2009; Ingram et al., 2008). In an attempt to address all these points and to close the research gap, the challenge now lies in exploring the social domains of experience, which have the potential to activate the customer's reward system if they are adequately addressed by a salesperson's cognitive abilities (Chiao et al., 2004; Spear, 2000).

A salesperson's cognitive abilities and skills include consultative task behaviour, focusing on problem-solving and identifying opportunities (Liu & Leach, 2001), personal relationship behaviours, and focusing on the welfare of the customer (Geiger & Turley, 2005). Hence, the salesperson's cognitive performance can be defined as the behaviour resulting from demonstrating competence, consistence and predictability, care, empathy, mentalising, goodwill, honesty, fairness, dedication and commitment to a goal. It is interesting to note that these are well-established constructs in the buyer-seller relationship literature (Kasperson, Golding, & Tuler, 1992; Peters et al., 1997; Renn & Levine, 1991). At the time when buyer-seller and salesperson-customer relationships were studied with traditional methods such as interviews, observations and focus groups, it was not clear what kind of benefits the advances in neuroscience could provide to these established research fields. Nowadays, neuroscientific research has proven that these cognitive behaviours address both the customer's logical (controlled) and emotional (automatic) brain, which unconsciously activate the customer's human reward system, resulting in an interpersonal reward situation within the customer's brain and therefore in a conscious pleasurable experience. Cognitive processes underlie many unconscious components which cannot yet be explained rationally (Morin, 2011). However, in this context, if a salesperson was aware of which social cognition processes (Section 2.2.2) were influenced with his cognitive performance, he would be able to focus more consciously on the production of interpersonal reward situations, which may influence the customer's decision-making process (Fugate, 2008) during the various stages of the relationship development. This would in turn add to the understanding of how long-term salesperson-customer relationships are developed (Hsu, 2016).

Within the topic of long-term buyer-seller relationships, the nature of the personal relationship quality of the individual salesperson-customer relationship has often been discussed (Brashear, Boles, Bellenger, & Brooks, 2003; Newell, Belonax, McCardle, & Plank, 2011). There is general agreement that relationship quality can be conceptualised through the components of trust, commitment and satisfaction (Beatson, Lings, & Gudergan, 2008). This implies that a high-quality relationship results from elevated levels of trust, commitment and satisfaction (Wulf et al., 2001). Nowadays, neuroscientists are just as interested in these components (Borum, 2010; Carter, 2009; Dimoka et al., 2007) as they are in intuition, emotion and memory (Lieberman, 2000; Ochsner & Schacter, 2000). Therefore, one of a

salesperson's most important roles is to establish and to maintain a mutually trusting relationship with the customer which results in purchase and repurchase intentions and positive WOM during the interpersonal relationship (Hennig-Thurau, Gwinner, & Gremler, 2002). As a customer's trust in a salesperson is an important component for a higher quality relationship (Guenzi & Georges, 2010; Swan et al., 1999), it can also be argued that it is crucial for the development of a long-term customer relationship (Dorsch, Swanson, & Kelley, 1998)

A great deal of research has been carried out into how a long-term salesperson-customer relationship develops over time (Biong & Selnes, 1995; Boles, Brashear, et al., 2000; Boles, Johnson, et al., 2000). During the various development stages, rewarding situations not only influence the customer's decision-making process (Fugate, 2008) but also increase the level of trust between the salesperson and the customer (Borum, 2010; Parasuraman, Berry, & Zeithaml, 1991). It can therefore be argued that trust is a significant part of the development of these relationships and that the trust-building process passes through distinct development stages (Lewicki & Bunker, 1996). Trust usually begins with a risk analysis by all the involved parties (Petermann, 2013). However, it is very difficult for both the salesperson and a customer to estimate the risk in their relationship when it is in its initial stages. On the one hand, because the salesperson tries to maximise the sales price of the product or service and on the other, because the customer aims to achieve the lowest price for the best product or service so as to gain the biggest economic benefit (Ingram et al., 2008). Therefore, an interpersonal relationship most likely begins when one of the parties is willing to take a risk (Weber et al., 2005). If this step is completed and the risk is estimated, the interactions between the two parties then pick up momentum. As the rate of positive interactions increases, the rational factors are pushed further into the background and relationship factors and relational behaviours come to the fore (Rousseau et al., 1998).

The traditional perspective is that there is no need for trustworthy behaviour if there is no risk in the interpersonal relationship (Cowles, 1997). Knowing that the human reward system has the potential to produce interpersonal reward situations in the customer's brain, this neuroscientific complement shows why interpersonal relationships are needed in the buyer-seller relationship even in the absence of trust. Even if there is an absence of risk, rewarding situations are indispensable in interpersonal relationships because interpersonal reward situations are an integral feature of influencing consumer behaviour (Poore et al., 2012). Uncertainty and vulnerability usually prevail at the beginning of a personal relationship between a salesperson and his customer. If the salesperson does not act confidently, this shows vulnerability, which causes a reaction in the customer's emotional brain and therefore influences the human reward system negatively, with the result that a threatening situation may incur (Bosworth and Zoldan, 2012).

As already mentioned in Sections 2.2.3 and 2.2.4, various concepts such as reciprocity, empathy and mentalising, etc. have been the subject of comprehensive research in buyer-seller and salesperson-customer relationships for some time now (Ahearne et al., 2007; Peters et al., 1997), and they are indispensable components in the description of a salesperson's cognitive performance during the development of an interpersonal relationship

with the customer. The law of reciprocity plays an important role within a personal relationship, and is a fundamental principle of human action in general (Ninness, 2008). If someone gives something to another person, the recipient feels committed to give something back – which is actually an ideal situation for a salesperson. However, one can argue that the customer is not particularly interested in the interpersonal relationship itself, but only in the benefits, value and the achievement of his instrumental objectives which an interpersonal relationship brings. To achieve these goals, an interpersonal relationship is needed and buyers want to work with sellers on the basis of a quid pro quo transaction. (Bettencourt, Blocker, Houston, & Flint, 2015).

Reciprocity is even regarded as a powerful instrument in economic domains (Fehr & Gächter, 2000), such as in the area of relationship building and fostering interpersonal connections (Ninness, 2008). Nevertheless, psychological literature such as that of Petermann (2013) claims that reciprocity has no rational character. It consists mainly of the principle of hope, which refers to actions carried out in the hope that one of the partners met will do the same in the end. In particular, reciprocity often takes the form of an exchange of gifts or presents (Fehr & Gächter, 2000) when a salesperson visits a customer. In this context, gift-giving is related to inviting the buyer to a convention, hospitality event, training seminar, professional development event, etc. and in return, the seller receives the business contract.

From a neuroscientific perspective, it was found that gift-giving is related to an immediate reward, which primarily activates the automatic social cognition system (limbic system, posterior cingulate cortex and nucleus accumbens) (McClure, Li, et al., 2004). This exchange of gifts often raises the level of reciprocity to a positive level, especially at the beginning of the relationship. The initiative for the reciprocity normally lies with the salesperson because he wishes to create a positive interpersonal relationship and to sell his products and services. While the salesperson waits for a return gift, there is a phase of uncertainty, which is particularly crucial for the relationship. During this time, the two-sided relationship is characterised by expectations as well as vulnerability (Pillutla, Malhotra, & Murnighan, 2003). Consequently, this situation can be considered decisive because it has a significant influence on the development of a long-term salesperson-customer relationship.

Even though the traditional marketing literature claims that reciprocity has no rational character, neuroscientists have found that reciprocity in the form of gift-giving activates the automatic brain areas of the limbic system, which may result in an interpersonal reward situation (McClure, Li, et al., 2004). In a salesperson-customer relationship, the exchange of gifts may activate the automatic brain process of the human reward system. Knowing this neuroscientific fact could help salespeople to gain an advantage over their competitors in specific sales situations.

Empathy, in contrast to reciprocity, is regarded as one of the core foundations in a salesperson's contact with his customers. It is also deemed to be a core construct in service quality with respect to the comparison of expectations regarding a duty with performance (Parasuraman et al., 1991). Failure to correctly interpret the intentions and personality traits

of one's partner makes it almost impossible to develop a long-term personal relationship (Petermann, 2013). A salesperson must be able to demonstrate empathy to successfully sell his products and services. Furthermore, excessive selfishness and strongly competitive behaviour are incompatible with trustworthy actions (Petermann, 2013). Therefore, researchers such as Biong and Selnes (1995) claimed that empathic behaviour is an aspect of relational selling in long-term buyer-seller and salesperson-customer relationships. In addition to that, empathy plays a major part in building quality relationships with customers (Boles, Johnson, et al., 2000). Therefore, empathic behaviour can result in a higher quality relationship and has the potential to improve sales performance (Boles, Brashear, et al., 2000).

According to de Vignemont and Singer (2006), empathy has two major roles: firstly, the epistemological role of empathy lies in providing information about the future actions of other people and important ecological features. The second role serves as a source of motivation for cooperative and prosaic behaviour to facilitate effective social communication. The nature and extent of these roles can vary and depend on the type of relationship and the situation in which we perceive the other person to be (Akitsuki & Decety, 2009). Like reciprocity, empathy is a well-established construct within the wider literature on salesperson-customer relationships. This means marketing literature suggests what the role of empathy is and what kind of consequences we can expect if empathic behaviour is maintained with a customer. However, marketing literature does not explain how empathy acts as a process. For this reason, researchers can use neuroscience to gain a full comprehensive picture of empathy and how it works in the human brain.

From a neuroscientific perspective, empathy is explained as the ability to comprehend the thoughts, feelings and motivations of other people through the use of one's own mind as a model (Rameson & Lieberman, 2009). Lieberman (2007, p. 263) also refers to this as *"experiencing the mental states of others"*. This is a further skill that a salesperson needs to have to better understand a customer's signals and intentions. The brain regions associated with empathy are the anterior insula and dorsal anterior cingulate (Wicker et al., 2003). Furthermore, there is activity in the ventro medial prefrontal cortex, medial prefrontal cortex, dorsomedial prefrontal cortex and medial parietal cortex (Farrow et al., 2001). Empathy can be understood as a dual-process model with an affective and a cognitive component (Rameson & Lieberman, 2009). Therefore, it consists of automatic affective experience and controlled cognitive processing, both different, but linked in the brain (Decety & Jackson, 2004; Keysers & Gazzola, 2007; Rameson & Lieberman, 2009).

Furthermore, the theory of how people understand others is also called Simulation theory (Rameson & Lieberman, 2009). The Simulation theory of empathy includes intentional as well as emotional behaviour in which the conscious and unconscious processes in the brain are activated. Another view of empathy is based on intuition, i.e. when someone attempts to recognise the situation of others without the awareness of the mind (Gordon, 1986). Empathy is also associated with sympathy and might also serve as a basis for cooperation, altruistic behaviour and human communication (de Vignemont & Singer, 2006). Therefore, cooperation and empathy are very important in the salesperson-customer context. Empathy

and the resulting cooperative behaviour lead to a reward situation, whereas non-cooperative behaviour tends to a create a threat situation (Frith & Singer, 2008).

Interestingly, the construct of empathy and its influence on important sales outcomes is well researched in the sales literature (Ingram et al., 2008), but researchers do not fully understand which of the human brain areas and processes are addressed. If neuroscientific findings were applied in this case, this would provide us with the fundamental knowledge and information to understand the human brain and its processes during empathetic behaviour. For example, mirror neurons are often used to explain empathy (Rameson & Lieberman, 2009). During the simulation of other experiences (Gordon, 1986), the neural connection to the brain is established through mirror neurons, which confirms the Simulation theory (Gallese & Goldman, 1998). Mirror neurons allow us to recognise the intentions of others (Iacoboni, 2009). Empathy can be viewed as an automatic, unconscious process whereby someone feels and understands the emotions of others via shared mental representations (mirror neurons) (Rameson & Lieberman, 2009). Although mirror neurons constitute a basis from which to understand the behaviour, intentions and experiences of others, Lieberman (2007) confirms that they have still not been proven empirically.

To date, imitation experiments with mirror neurons have often been performed with macaque (monkey) brains and not with human brains (Iacoboni, 2009). Experiments with humans are undertaken using the technique of functional magnetic resonance imaging (Lieberman, 2007). However, during the imitation and observation of emotional facial expressions, mirror neurons and limbic regions are often activated, including the premotor cortex, the inferior frontal cortex, the posterior superior temporal sulcus, the anterior insula and the amygdala (Carr, Iacoboni, Dubeau, Mazziotta, & Lenzi, 2003). In addition to that, being located in the frontal lobe, the premotor cortex and the parietal lobe, Carter (2009) deduced that mirror neurons are not only concerned with intentions but also with sensations. She believed that humans unconsciously imitate, i.e. mirror the facial expressions of our discussion counterpart and thus share part of their experience, which results in us feeling what they feel. However, mirror neurons are only activated when people perform an action with an intention behind it (Iacoboni, 2009). This explains why a smile is sometimes answered with a smile and sometimes not. Iacoboni (2009) explained this phenomenon by arguing that mirror neurons initiate the imitation or simulation of facial expression inwardly. These signals are then passed through the insula to the limbic system. Through this observed emotion, people can feel the same as their discussion counterpart.

During salesperson-customer interactions, this sense of equality is essential and may offer an opportunity to learn from each other through the activation of the mirror neurons (Iacoboni, 2009). Frequently, the same emotional expressions such as laughing or nodding are used like the counterpart. These mirror neurons are the reason why people feel connected to each other (Petermann, 2013) and see themselves as equal, and therefore demonstrate similar behaviour (Decety, Jackson, Sommerville, Chaminade, & Meltzoff, 2004). Keysers and Gazzola (2006) mentioned that if two people wish to work well together, each of them needs to understand the current emotional state of the other. This can be achieved with the help of mirror neurons (Iacoboni, 2009). In fact, the concept of empathy and its

influence on important sales outcomes is well established (Ingram et al., 2008), but we still do not fully understand how the human brain processes information during empathic behaviour. Therefore, mirror neurons add value and allow neuroscientists to explain how empathy addresses the human brain processes. This is positive news for researchers in all fields of marketing because such neuroscientific findings improve their understanding of how traditional, well-researched marketing concepts work in the customer's brain.

Closely connected with empathy is the concept of mentalising (Borum, 2010). As with empathy, in the context of this study, mentalising involves understanding the customer's needs and responding to them by making an adequate product or service offer. Hence, the goal is to simultaneously fulfil the salesperson's and the customer's needs. From the seller's view, this requires the salesperson to understand the customer's perspective and navigate the negotiations skilfully to achieve a signed contract. To be successful at this, the salesperson must be able to understand the customer's mental state and processes (Dietvorst et al., 2009). The only way to do this is to know what the customer is convinced of or what he perceives. According to Frith and Singer (2008), the distinction between mentalising and empathy, particularly in terms of interpreting feelings and emotions, lies in understanding a person's beliefs or desires.

Singer and Fehr (2005) examined mentalising and emphasising in the context of neuroscience. They argued that the capacity to empathise with or to simulate an internal state will help to predict the counterpart's probable action. Based on this perspective, Dietvorst et al. (2009, p. 653) formulated the expression *"interpersonal mentalising"* to describe the interpretation of a human being's internal mental state. During mentalising, the aim is to infer the beliefs and desires of others and to make suppositions about their purposes, plans and intentions (Frith & Singer, 2008). Lieberman (2007, p. 263) refers to this to as *"representing the psychological states of others"*.

If he had all these neuroscientific insights, the salesperson would have a better understanding of the customer's mind. Mentalising occurs primarily in the frontal lobes (Stuss, Gallup, & Alexander, 2001), a region of the brain which is related to the controlled social cognition system (Dimoka et al., 2007). During interpersonal mentalising, the conscious and unconscious brain processes are activated simultaneously; the sub-regions of the frontal lobes, such as the medial prefrontal cortex, the left and right temporal parietal junctions and the left and right temporal poles, are primarily stimulated (Dietvorst et al., 2009; Frith & Frith, 2003; Lieberman, 2007). The argument that these brain regions are activated during interpersonal mentalising tasks is supported by research carried out on patients with injury to the frontal lobes (Miyake et al., 2000), which showed that frontal lobe lesions impair a person's ability to feel the mental states of other people (Stuss et al., 2001). It is exactly these mental states which are crucial in the development of a long-term salesperson-customer relationship. Dietvorst et al. (2009) confirmed that a salesperson with advanced interpersonal mentalising abilities demonstrates a stronger connection between the three areas of interest, namely the medial prefrontal cortex, the temporal parietal junctions, and the temporal poles during a mentalising task. The operation of this strong network in the brain can explain why some salespeople are better than others at interpreting a customer's

emotional state (Dietvorst et al., 2009). Strong mentalising abilities could therefore offer these salespeople a significant advantage in customer negotiations.

Both mentalising and empathy activate the automatic social cognition system. Consequently, during a salesperson's interpersonal mentalising behaviour, the customer's reward system is activated. This may lead to an interpersonal reward situation which will affect trust and bond security in the development of a long-term salesperson-customer relationship (Poore et al., 2012).

In conclusion, relational selling concepts (Biong & Selnes, 1995) such as reciprocity, empathy and mentalising used to be widely discussed concepts in the literature of buyer-seller and salesperson-customer relationships (Ahearne et al., 2007; Peters et al., 1997). It is also evident that these concepts include the mental processes of the automatic and the controlled social cognition processes which are unconscious and conscious in nature (Lieberman, 2007). Therefore, it seems that traditional marketing researchers investigating these concepts can explain *"what"* kind of influences and consequences these concepts can have in a long-term salesperson customer relationship, but they cannot explain *"how"* these concepts work in the human brain and the respective brain areas. This has resulted in a research gap which cannot be addressed with the traditional research methods and techniques; rather, it needs the insights from social cognitive neuroscience in combination with these traditional research methods.

Thus, there is an urgent need for comprehensive and complementary research disciplines such as social cognitive neuroscience. This relatively new research field has the potential to explain how which concepts affect the customer's mind (Lieberman, 2007, 2012). As a consequence, neuroscientists will be able to investigate the effects this may have on the well-established concepts. By explaining what kind of influences and consequences that these concepts have on the development of a long-term salesperson-customer relationship and understanding how the human brain processes information in the human reward system and the resulting thought processes, the research gap of this study becomes more evident. This means the relationship between the social domains of experience and interpersonal reward situations are explored. Hence, investigating how salespeople and their cognitive performance can activate the social domains of experience represents a significant contribution to traditional research methods and techniques.

2.2.6 Customer's Decision-making Process in Salesperson-Customer Dyads

As highlighted repeatedly in the previous sections of this chapter, the salesperson must be able to understand the customer's decision-making process in negotiations. In this context, the decision-making process under conditions of uncertainty, which has already been widely researched in salesperson-customer relationships, must be explored further (Taghavifard, Damghani, & Moghaddam, 2009). The customer is particularly uncertain at the beginning of their relationship. Therefore, this stage in the process sees both sides exchange large amounts of information in an effort to reduce any feelings of uncertainty they may have (Sias,

2008). Uncertainty is a state where the subject(s) has/have limited information on a subject, which makes it impossible to accurately describe the current situation or the future outcome (Mallin, O'Donnell, & Hu, 2010). Therefore, investigations into situations of uncertainty are important, because, in many cases, managers have very little information during the decision-making process, which at most can lead to the wrong decision and thus to a risky outcome (Ford, Gadde, Håkansson, & Snehota, 2011). In the context of buyer-seller relationships in B2B, there are different sources of uncertainty such as market uncertainty, technological uncertainty, competitive volatility, network externalities and the importance of industry standards, unit-one costs, tradability problems and knowledge spillovers (Mohr, Sengupta, & Slater, 2010; Sharma, Iyer, & Evanschitzky, 2008).

In situations of certainty, a logical analysis of the situation is conducted, whereas decisions made under conditions of uncertainty are often not traceable and in many cases subjective in their outcome (Lamar, 2006). This statement is consistent with that of Huettel, Song, and McCarthy (2005), who confirmed that people make optimum decisions when they are sure that the consequences of their actions will not be detrimental.

According to Dimoka et al. (2007), there are basically two brain regions which are associated with the decision-making process. These are the prefrontal cortex (Ernst & Paulus, 2005), which is responsible for the cognitive aspects (Sharot, Delgado, & Phelps, 2004), and the limbic system (McClure, Laibson, Loewenstein, & Cohen, 2004), which is responsible for the emotional aspects of decision-making (Sharot et al., 2004). Decision-making areas in the prefrontal cortex are the ventromedial prefrontal cortex, which affects the emotional state (Damasio, 1996), and the orbitofrontal cortex, which regulates planning and behaviour in association with uncertainty, rewards and punishment (Kringelbach & Rolls, 2004). Within the limbic system, the amygdala is responsible for positive and negative emotions in verbal stimuli (Hamann & Mao, 2002) as well as for producing the emotions of anger, jealousy, distrust, negative emotions, pleasure and fear (LeDoux, 2003). Furthermore, the cingulate cortex, the nucleus accumbens and the hippocampus are all essential, active components of the decision-making process and consequently play a decisive role in salesperson-customer interactions. The first of these brain areas is involved in decision-making and reward anticipations (Mayberg et al., 1999), the second is associated with rewards, and the third is responsible for the long-term memory (Dimoka et al., 2007).

In reflecting on this discussion of decision-making in connection with uncertainty, it is evident that there are automatic and the controlled social cognition processes involved, such as in the case of reciprocity, empathy and mentalising (Section 2.2.5). This means that the unconscious as well as the conscious part of the customer's brain are activated. Thus, it can be argued that the emotional customer's mind also plays a major role in the decision-making process. It is noteworthy that people revert back to personal experience in situations of uncertainty, instead of going through a rational decision-making process (Taghavifard et al., 2009).

2.3   Conclusion

This chapter had three main goals. Firstly, it aimed to provide an understanding of the advantages that the application of social cognitive neuroscience could bring to relationship marketing, buyer-seller relationships and salesperson-customer dyads; secondly, it discussed how the latest neuroscientific findings could contribute to existing relational selling concepts in B2B and finally, it explained how the research gap could be incorporated into the explanation of long-term salesperson-customer relationships to ultimately create a window into the black box of the customer's mind.

If social cognitive neuroscience were applied to salesperson-customer relationships, it would improve researchers' understanding of how the human reward system works, how interpersonal reward situations could be produced, how the decision-making process works in certain situations, and how the salesperson's cognitive performance could potentially address the customer's unconscious mind. A better understanding of these neuroscientific insights would in turn have a flow-on effect to sales techniques and salesperson-customer interactions. Salespeople could become more efficient and sell their consumer products more effectively in the process (Hsu, 2016). Interestingly, neuroscientists and marketing researchers believe that the same neuroscientific concepts can be applied for B2C and B2B, but only the touchpoints are different (O'Connell et al., 2011).

This chapter also highlighted that 90% of information which reaches the human brain is unconscious in nature and does not require any input from the working memory capacity of the mind. Only the remaining 10% of information which is consciously perceived needs cognitive load (Zurawicki, 2010). Thus, neuroscientists have proposed a dual-process framework (Table 3) for the unconscious and conscious brain networks (Bargh, 1999; Chaiken & Trope, 1999) to make it easier to apply these networks to other fields studying human behaviour (Lieberman, 2007). Despite the complexity of the human brain, this has resulted in a simplified representation of the automatic and the controlled social cognition systems. This dual-process framework can be used to describe the human reward system, and be included in the investigation of the development of a long-term salesperson-customer relationship in B2B.

Three significant facts emerged from this discussion of the neuroscientific insights. Firstly, there is a principle which drives human motivation: pleasurable situations have to be maximised and threatening situations have to be minimised (Gordon, 2000). Secondly, there are social domains of experience that seems to be related to the human reward system which aim to maximise positive and minimise negative feelings (Lieberman & Eisenberger, 2009). Thirdly, rewarding situations facilitate the production of trustworthy situations and thus increased levels of trust and bond security between interacting parties (Poore et al., 2012). This neurological knowledge makes it possible to explore the black box of the customer's mind (Section 2.2.4, Figure 7) in more detail. Consequently, the current research gap, which stems from not integrating the social domains of experience into the explanation

of the development and maintenance of a long-term salesperson-customer relationship, is intended to be filled.

With the latest neuroscientific findings, marketing researchers do not only need to rely on what kind of influences and consequences relational selling concepts such as reciprocity, empathy, mentalising, decision-making and uncertainty have on long-term salesperson customer relationships. They may also able to explain how these processes work in the customer's brain. The discussions in Chapter 2 have also shown that trust plays a major role in such long-term salesperson-customer relationships because it is accompanied by uncertainty and risk. This means that in the absence of uncertainty and risk, there is no need for trustworthy behaviour (Cowles, 1997). However, since uncertainty and risky situations are significant problems in the development of a long-term salesperson-customer relationship, the concept of trust is automatically part of these relationships.

Furthermore, the characteristics of a long-term salesperson-customer relationships will be discussed in Chapter 3 so that the black box of the customer's mind can be incorporated into these relationships and therefore add a neuroscientific perspective to the existing environment (Section 1.2, Figure 1).

3 CHARACTERISTICS OF A LONG-TERM SALESPERSON-CUSTOMER RELATIONSHIP

3.1 Introduction

Chapter 3 will discuss, reflect on and critique the literature on the characteristics of a long-term salesperson-customer relationship. Therefore, the literature in this chapter is mainly drawn from B2B, and insights from social cognitive neuroscience are presented to find important research gaps in the development and maintenance of long-term salesperson-customer relationships. It will argue that any research into such relationships that does not consider the social domains of experience lacks an important dimension. This is because personal selling, including the production of interpersonal reward situations, is a crucial component of a successful long-term salesperson-customer relationship, and needs to be considered during future investigations into the topic. Consequently, the goal of this chapter is to understand the relationship marketing process, including the antecedents and the consequences of a long-term salesperson-customer relationship, which is to a large extent based on the quality of the relationship between buyer and seller parties (Beatson et al., 2008; Boles, Brashear, et al., 2000; Boles, Johnson, et al., 2000). This chapter will begin by examining the relevance of relationship marketing for buyer-seller relationships (Section 3.2). This will be subdivided into a discussion on the emergence of relationship marketing (Section 3.2.1) and a critical explanation of the marketing strategy continuum (Section 3.2.2). The B2B relationship marketing process will also be explored (Section 3.3), including the quality concepts in long-term salesperson-customer relationships (Section 3.3.1), the consequences (Section 3.3.2) and the antecedents of these quality concepts (Section 3.3.3). Furthermore, the benefits of a long-term salesperson-customer relationship will be examined (Section 3.4), including the discussion of the development process in a long-term salesperson-customer relationship (Section 3.4.1) and personal selling in the development of a long-term salesperson-customer relationship (Section 3.4.2) before the chapter is concluded (Section 3.5).

3.2 Relevance of Relationship Marketing for Buyer-Seller Relationships

Relationships between buyers and sellers have to be established, developed and maintained (Boles, Brashear, et al., 2000; Boles, Johnson, et al., 2000; Ingram et al., 2008; Morgan & Hunt, 1994), as is the case for an interpersonal relationship between a salesperson and a customer. In order to be successful, such relationships in B2B markets with complex and customised products and services have to be long-lasting and provide benefits, financial and the like, for both sides (Bettencourt et al., 2015; Ingram et al., 2008; Palmatier, 2008). Examples of markets include industrial machinery, computer, electronic and optical products, transport equipment and knowledge-intensive services (Madhavaram & Appan, 2010). In order to understand the current situation of a long-term salesperson-customer relationship in the aforementioned environments and to understand the development of the relationship between sales personnel and their customers, it is necessary to discuss the nature and scope of relationship marketing. In addition, the current literature on personal selling, which is part

of relationship marketing, needs to be understood. The importance of this understanding can be seen in the historical development of short-term transactions towards long-term relationship marketing with increasing interest in individual customers and their interactions with the company (Castaldo, 2007; Goi, 2009; Grönroos, 1994; Gummesson, 2002). Continuing neuroscientific investigations of interpersonal relationships are gaining in popularity in the research field of relationship marketing and salesperson-customer relationships (Hsu, 2016; O'Connell et al., 2011), because they also incorporate the dimension of the human brain (Lieberman, 2007) into the sales process.

Ghazy and Turki (2014) argued that there is still confusion around the concept of relationship marketing despite intensive research on it over the past few decades. They believe that this confusion is mainly due to the different origins of relationship marketing (Section 3.2.1) and two repeatedly asked questions: What constitutes a relationship? and What form does a relationship take?

Perhaps the confusion stems from the fact that the automatic social cognition process, which is more emotional in nature, has not yet been incorporated into the development of scientific and practical questions related to the controlled social cognition process. The inclusion of both of these processes helps researchers' understanding of how people make purchase decisions and how a long-term salesperson-customer relationship is developed (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). However, Ghazy and Turki (2014)'s question is also important in connection with the application of neuroscience to salesperson-customer relationships. This is because neuroscience can provide the answer to how the *"black box of the customer's mind"* (Section 1.2, Figure 1) can be incorporated into the concept of relationships. It is therefore interesting to examine *what constitutes and what forms a relationship* in the context of the current study when the neuroscientific perspective is included.

Several decades ago, Dwyer, Schurr, and Oh (1987) investigated the development of buyer-seller relationships, examined their discrete and relational exchanges and proposed a model on how relationships can be formed. Morgan and Hunt (1994) further developed their ideas and suggested a model with various forms of relational exchanges in relationship marketing, such as internal, supplier, lateral and buyer partnerships. The relevant relational exchange for this study is the buyer partnership (intermediate and ultimate customers). In particular, the development of a long-term salesperson-customer relationship in which manufacturers are in direct contact with the customers and in which there is still considerable potential to improve the emotional bonding and to integrate the reward system into the approach (Poore et al., 2012) is of interest to the current research study.

As evident from the literature, it is still necessary to understand the nature and scope of the relationships with customers (Brito, 2008) and to make and keep individual customer promises (Ghazy & Turki, 2014). Therefore, this chapter will focus on how relationship marketing developed over time, thereby involving different academic positions, so as to better understand such relationships. It will further highlight personal selling in B2B markets. Personal selling in B2B markets with complex and customised products and services is

viewed as critical these days, mainly because of the product and service complexity. Researchers such as Sharma et al. (2008) noted that the research into personal selling in B2B markets in the aforementioned fields has not yet received full attention and that research in connection with relationship marketing must be developed further. Therefore, it is reasonable to explore long-term salesperson-customer relationships in the B2B sector and to include the latest findings from neuroscience in the research approach. Social cognitive neuroscience investigates the human brain processes to better understand other people and to better understand oneself (Lieberman, 2007) (Section 2.2.1). It can be argued that the context of a long-term salesperson-customer relationship needs to be clarified and that interpersonal reward situations are required and need to be explored further.

3.2.1   Emergence of Relationship Marketing

As noted in Section 3.2, the emergence of relationship marketing is rooted mainly in the criticism of transactional marketing (Grönroos, 1994; Gummesson, 2002; Möller, 2006). Berry (1983) officially introduced the term relationship marketing as a new category of service marketing. Middlemen acting as channel partners were engaged for the purpose of understanding exchange relationships and business performance (El-Ansary, 1975; Emerson, 1962). Bagozzi (1975, p. 32) suggested that the exchange concept is a key factor "*in understanding the expanding role of marketing*". During this period, several relationship marketing strategies originated in different regions of the world.

One of the first strategies for an exchange concept was the *Nordic School perspective* (Grönroos & Gummesson, 1985). At that time, marketing was seen as short-term transactional and not long-term relationship-oriented in nature until Jackson (1985) made the fundamental distinction between transactional and relationship marketing. This European approach originated in the area of service marketing and focused on business networks and relationships. Gummesson (1987) emphasised the development and maintenance of long-term relationships between buyers and sellers by integrating services marketing and industrial marketing into the B2B context. He believed that this has a strategic effect on the marketing planning activities of a company.

Another strategy was the *US School approach*, which examined long-term relationships in service marketing in B2B markets (Berry, 1983, 1995). A little later, the concept of channel management emerged in North America with the aim of reducing transaction costs and improving services in exchange (Anderson & Narus, 1990; Dwyer et al., 1987).

A third strategy was the *Anglo-Australian School*, which merges logistics, quality, marketing and customer service to coordinate customers and foster cooperation within the company so that the marketing mix can be incorporated efficiently and helps managers to enhance business relationships and to maintain stakeholder dialogue (Christopher, Payne, & Ballantyne, 1991). This advent of relationship marketing led to many other researchers investigating relationship marketing from different perspectives.

One other perspective includes database marketing (Sheth & Parvatiyar, 1995) or the relatively recent concept of Customer Relationship Management (CRM) (Ballantyne, Christopher, & Payne, 2003). CRM originated in two different places with two subsequent different strategies and initially two different perspectives. One focused more on the management of information systems, lead management and telemarketing support to organise sales force costs more efficiently. The other perspective largely focused on customer loyalty and retention (D. E. Schultz, 2000). One strategy emanated from the United States; it takes a more internal view and is mainly focused on technology with a strong affiliation to sales and marketing management (D. E. Schultz, 2000). This strategy is designed to collect as much data about customers and to bundle the front-ends accordingly. Therefore, the front-end services are usually aligned with profitability, and incentives are created to achieve it. Hence, this strategy is database-driven (Dowling, 2002). The other strategy had its origins in Scandinavia and Northern Europe, and represents a more external viewpoint. Services marketing serves as its base for both and the main objective is to nurture a higher quality relationship with loyal customers (D. E. Schultz, 2000).

Compared with these approaches to relationship marketing and customer relationship management, the current study is more in line with the European approach, with the aim of developing long-term salesperson-customer relationships, since business is not driven by "*short-term top lines*" but rather by "*long-term bottom lines*" (D. E. Schultz, 2000, p. 11).

The development of long-term relationships (Ford, 1990) includes personal relationships between salespeople and their customers to understand the latters' needs and derive benefits for them (D. E. Schultz, 2000). When the aim of long-term salesperson-customer relationships is to attract larger numbers of happier and profitable customers for the company, this covers the subject area of relationship marketing (Ballantyne et al., 2003; Berry, 1983; Christopher et al., 1991; Grönroos, 1994; Gummesson, 1994; Morgan & Hunt, 1994; Payne, 1995).

Berry (1983) was one of the first to introduce the term relationship marketing and he proposed a definition from the perspective of service marketing. His view is that the service and care provided to existing customers contribute to the success of a long-term relationship and may also attract new customers. Therefore, Berry (1983, p. 25)'s definition: "*attracting, maintaining, and – in multi-service organizations – enhancing customer relationships*" is in line with the argument that selling is essential for creating relationships and that good service is vital for preserving relationships. Jackson (1985, p. 2), who made the fundamental distinction between transactional and relationship marketing in B2B markets, defined relationship marketing as "*marketing oriented toward strong, lasting relationships with individual accounts*". His definition encompasses the personal face-to-face aspect, which constitutes a strong relationship. One of the first definitions of relationship marketing originates from Grönroos (1990). He incorporated the strategically important component of profit into his definition and focused on the mutual fulfilment of the strategic objectives in marketing. Grönroos (1990, p. 138) defined relationships within marketing in a broader sense "*to establish, maintain, and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by a mutual exchange and fulfilment*

of promises". In his eyes, relationships which are not profitable should be terminated. Shani and Chalasani (1992) highlighted the network aspect as well as database marketing in their definition, and integrated the more traditional concept of niche marketing. Shani and Chalasani (1992, p. 44) defined relationship marketing as *"an integrated effort to identify, maintain, and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualized and value-added contacts over a long period of time"*.

Morgan and Hunt (1994, p. 22)'s definition focuses largely on the idea that trust and commitment are the key parameters in relationship marketing to reach successful relational exchanges. It states that: *"Relationship marketing refers to all marketing activities directed toward establishing, developing, and maintaining successful relational exchanges"*. Their theory dominated relationship marketing for about two decades and caused considerable controversy. It is based on the difference between *"discrete"* transactional and *"ongoing"* relational exchanges (Dwyer et al., 1987, p. 11), supplemented by the concept of customers as exchanging participants. Dwyer et al. (1987)'s relational exchange theory is based on the relational contracting theory (Macaulay, 1963; MacNeil, 1980), which emphasises the importance of relational norms in the behaviour of human relations. However, the approach taken by Morgan and Hunt (1994) incorporates buyer partnerships in the form of intermediate and end customers, and all the relationships of a company are viewed as a whole. Furthermore, their definition focused on establishing, developing and maintaining customer relationships. End customers depict the direct link from the seller to the buyer company as implemented in loyalty programmes recommended within the service marketing environment (Crosby, Evans, & Cowles, 1990). Intermediate customers represent the connection between customers, i.e. distribution channels (Anderson & Narus, 1990). Another definition was suggested by Parvatiyar and Sheth (1999), who included activities and programmes in their definition and distinguished between immediate and end customers. Parvatiyar and Sheth (1999, p. 8) defined relationship marketing as *"the ongoing process of engaging in cooperative and collaborative activities and programs with immediate and end-user customers to create or enhance mutual economic value, at reduced cost"*. They suggested three dimensions to illustrate a process model of relationship marketing. This process consists of the decisions which make up cooperative and collaborative relationships. The first dimension is purpose, which helps to define the programmes and activities. The second dimension involves the selection of the right types of customers so that all efforts are efficiently aligned. And the third dimension relates to defining the appropriate programme. Here, the crucial factor of customers always looking for rewards and their associated benefits comes into play, which transforms relationship marketing into a dynamic construct.

As is apparent from the aforementioned discussion, the subject of relationship marketing, in particular the establishing, developing and maintaining of interpersonal relationships, has been widely explored to date. After reviewing relationship marketing definitions, Palmatier (2008) conceptualised four general stages and terminologies of marketing steps, which he termed *establishing, developing, maintaining and terminating relationships*. Termination is a non-negligible and significant factor because consuming relationships are more likely to be

terminated than managed. It costs more and takes more resources to manage such relationships than to terminate them. Long-term relationships should offer a guaranteed benefit for both parties, which means that relationship marketing has to guarantee a Return on Investment (ROI) on the seller's side and an added value on the buyer's side (Palmatier, 2008). It is not only the long-term view of a relationship which leads to a profitable relationship with the customer (Reinartz & Kumar, 2000) but also the amount of money that a customer pays for a product or service over the course of the relationship (Dowling, 2002). Hence, improved monetary performance with long-term customers must be incorporated into the marketing strategy. If this aspect is included, Palmatier (2008, p.3)'s definition is: *"Relationship marketing is the process of identifying, developing, maintaining, and terminating relational exchanges with the purpose of enhancing performance"*. In this context, enhancing performance is related to the company's performance, which is indirectly related to the consulting behaviour that a salesperson shows to a customer (Pelham, 2009). Thus, long-term customer relationships undoubtedly also have to consider revenue generation and minimisation of transaction costs (Dowling, 2002). Future developments in the field might include the integration of the latest findings of social cognitive neuroscience as the next step.

In conclusion, these relationship marketing approaches focused on the same outcome, namely to see the company prosper financially and build up successful relationships with customers. Bruhn (2013) argued that the continuously changing economic and competitive conditions require ongoing adaptations of the marketing strategy in the respective markets. Sheth, Parvatiyar, and Sinha (2012) took the approach that increasing competition and demanding customers make the area of relationship marketing for practitioners and scholars intriguing. Palmatier (2008) called for an internal strategic vision in which the business strategy has to be coordinated with the marketing strategy to control economic and financial aspects such as lifetime value and customer loyalty. However, the whole scope of relationship marketing and its approaches is extremely challenging for future research because the customer's brain has not yet been included in all these approaches.

3.2.2   From Short-term Transaction to Long-term Relationship Marketing

Due to changes in customer behaviour markets and new findings in marketing science over the last few decades, marketing has become long-term in nature (Castaldo, 2007; Goi, 2009; Grönroos, 1994; Gummesson, 2002). This means that it is more relationship-focused than transaction-focused. There is a common consensus in the literature that transactional and relational exchanges can be viewed as a strategy continuum (Grönroos, 1994, 2007; Gummesson, 2002) rather than as two opposites on a scale. Figure 8 below presents one of the many illustrations in the literature of the marketing strategy continuum.

This means that a company can adopt and strategically implement a more transaction- or more a relationship-oriented attitude where appropriate (Brito, 2008). The marketing strategy continuum is a framework which explains how resources and relationships are managed. Resource management focuses on the average customer, whereas relationship management focuses predominantly on the individual customer. Relationship marketing is

concerned with the interaction between the two exchanging partners (Brito, 2008; Pels, Coviello, & Brodie, 2000). Transactional exchanges aim for single purchases, while repurchases and positive WOM are sought in relational exchanges. However, other researchers argued that both forms of exchange are still equally important. They believe that the two forms not only represent two poles of a continuum, but that transactional exchanges also serve as a basis before relational exchanges can be traced (Möller, 2007; Pels et al., 2000). They also argued that (1) the context of the market, (2) the way the exchanging partners view the context and (3) how the interactions can influence their situation in the market are crucial to answering the question of whether more transactional or more relational exchanges lead to the seller company being able to create economic value while reducing costs (Parvatiyar & Sheth, 1999).

Figure 8: Continuum between Transaction Marketing and Relationship Marketing
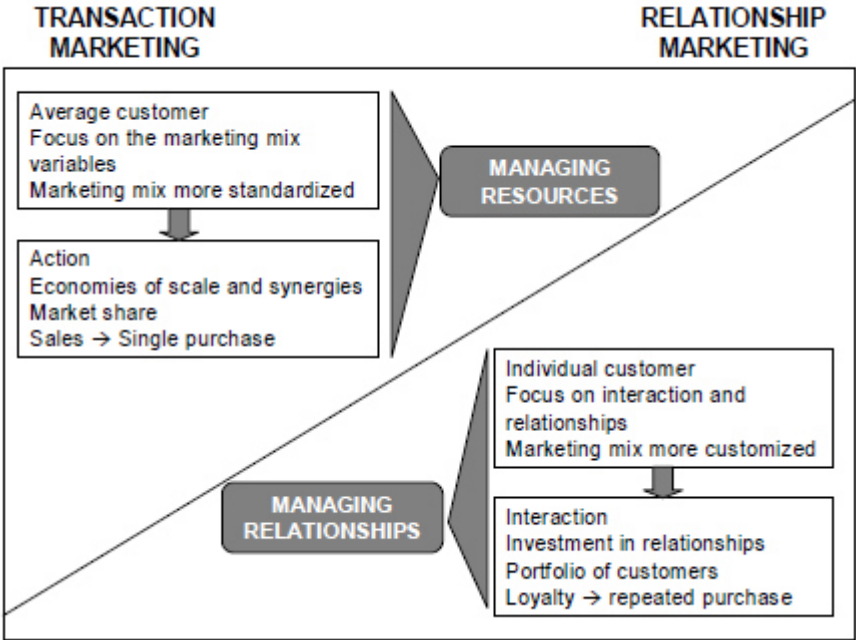
Source: Brito (2008, p. 10)

The marketing mix originated in the 1960s at a time of industrial growth and is based on four components: product, price, place and promotion (4 Ps). It often features widely in transactional marketing and is regarded as a framework to place customised offerings in the market (Grönroos, 1994). The general view in the literature is that the marketing mix is a relatively simple option to create an action plan and to calculate related cost estimates. The marketing mix has influenced the development of marketing theory and practice (Möller, 2007) and has two decisive advantages: (1) it is an important tool for marketing managers to highlight their own competitive strengths over those of their competitors and (2) the marketing mix shows another dimension on how an identity can be created for the company and its product (Goi, 2009). In fact, its tools can be used to develop short-term and long-term strategic programmes (Palmer, 2012).

Recent theories have expanded the marketing mix with additional Ps such as packaging, people and process. Despite the limitations of the marketing mix, the 4 Ps and the extensions remain a powerful tool which is still used to this day (Goi, 2009). Davies and Brush (1997) argued that the marketing mix is not suitable because it is matched to consumer business and relevant relationship aspects of the B2B sector rather than to complex and customised products and services. Möller (2006) criticised transactional marketing, noting that it does not involve any customer behaviours nor interactions with customers and is mainly a tool to manage marketing activities in theory. In contrast, relationship marketing is an interactive style of marketing which is supported by the marketing mix activities (Grönroos, 1994) and aims to form successful business relationships and to generate value for the buyer and seller parties (Anderson & Narus, 1999). Also, researchers such as O'Connell et al. (2011) believed that it is no longer just about the 4 Ps of the marketing mix when applying social cognitive neuroscience to marketing research (Section 1.2). Instead, they strove to include the customer's unconscious mind in the approach. Thus, affective and cognitive brain processes (Section 2.2.2) are included when defining a marketing strategy (Powell, 2011), because these processes allow a deeper insight into how customers remember experiences, make purchase and repurchase decisions, and build up loyalty with a salesperson (O'Connell et al., 2011).

Instead of just maximising short-term transactional sales, relationship-based marketing focuses on solving customer problems, providing opportunities and adding value to the customer's business. The desired outcomes are joint planning, trust in a salesperson, mutual benefits and enhanced profits (Ingram et al., 2008). In order to solely target customer relationships instead of single transactions (Grönroos, 1994), soft factors such as attitudes, values, feelings, cooperation, satisfaction and loyalty are considered (Tiwana & Williams, 2000) alongside rational factors such as goals, technology, data structures, subjects, revenue generation and transaction costs (Dowling, 2002). Rational factors form the foundation when developing long-term salesperson-customer relationships and as this development process progresses, these factors mutate into relationship factors, i.e. soft factors (Weber et al., 2005). During the dialogue between a salesperson and his customer, a high-quality relationship is sought which can be developed with positive interactions and interpersonal reward situations over time (Boles, Johnson, et al., 2000; Cullen et al., 2000; Weber et al., 2005). Hence, soft factors could be considered rather irrational in nature. Irrationality refers to facts or ideas which contradict human reason or simply elude it, which makes them somewhat affective in nature (Rosenberg, 1980). Affectivity corresponds to emotional behaviour of a customer towards a salesperson or a product (Matthews, Son, & Watchravesringkan, 2014). Investigations into the customer's emotional behaviour in sales situations should be the starting point for further neuroscientific investigations.

In conclusion, it is not a question of whether a company decides to use transactional marketing or relationship marketing, but whether it adopts a more transactional or more a relational attitude on the continuum depending on the market, customers, their interactions with the company and their perceptions (Pels et al., 2000). Secondly, to create a long-term salesperson-customer relationship, the relationship marketing approach should be enhanced

with a more dynamic form of the marketing mix, because the desired result is a relationship marketing process with a high-quality relationship (Boles, Johnson, et al., 2000) which enhances the profits and benefits for both parties (Boles, Brashear, et al., 2000; Ingram et al., 2008).

3.3   Business-to-Business Relationship Marketing Process

Planning, managing and controlling processes are necessary to improve the efficiency of relationship marketing (Holmlund, 2004). Earlier relationship marketing processes were composed of input, output and continuous evaluation (Evans & Laskin, 1994). With time, different level models were developed which include relationship marketing formation, management, performance and enhancement processes (Parvatiyar & Sheth, 1999). An example of a relationship marketing process was discussed by Grönroos (2004). He believed that an interaction process is required at the core of relationship marketing, along with a planned communication support process assisting the development of a relationship and a value process as the outcome of relationship marketing if a relationship strategy is to be successfully executed. All three processes have to be integrated so that the theory of relationship marketing can be successfully conceptualised and implemented into the market situation (Grönroos, 2004).

The development stages of marketing processes were conceptualised to improve researchers' and practitioners' understanding of developing successful relationships. One of the first to do so were Dwyer et al. (1987), who defined five phases: (1) awareness, (2) exploration, (3) expansion, (4) commitment and (5) dissolution. In the *awareness phase*, it is important that the two partners become aware of each other. At this stage, there are no interactions between the partners. In the *exploration phase*, potential benefits are identified and the interacting parties try to determine whether the other party is trustworthy, or not. In the further evaluation of the benefits, a relationship moves into the *expansion phase* and initial trust may be established, which leads to dependence between the two parties. In the *commitment phase*, promises are made and the relationship reaches its highest point. If the expansion and the commitment phases are over, a relationship often enters a *dissolution phase* and both parties do not see any value in maintaining the relationship any longer.

On the contrary, Holmlund (2004) believed that there was no systematic categorisation of the different types of customer relationships available in all the processes to improve understanding of relationships in industrial markets. Therefore, Reinartz, Krafft, and Hoyer (2004) included three process levels in their model of the performance outcome of the customer relationship management process: relationship initiation, relationship maintenance and relationship termination, and they supported Holmlund (2004)'s view that different levels of customer relationship interactions ranging from a single exchange up to the relationship portfolio have to be included. Such distinctions between the various levels of

interaction facilitate analysis of a relationship and further emphasise the importance of the interaction between the buyer and seller parties.

Interestingly, Pressey and Mathews (2000) previously highlighted the emotional and psychological importance of the interaction in the salesperson-customer relationship, and argued that an emotional bond is very important for a successful relationship with the customer. Over time, with the further developments in psychology and in neuroscience, these exchange processes between the salesperson and the customer have been adjusted with the moderating factors of a company such as trust, commitment and satisfaction. In addition to demand- and provider-related aspects, Bruhn (2013) also argued that there is a dedicated structure which can operate as a conceptual basis for planning, management and control of relationship marketing and which incorporates company input, psychological effects on the customer, behavioural effects on the customer and company output (Figure 9).

Figure 9: Basic Structure of the Success Chain
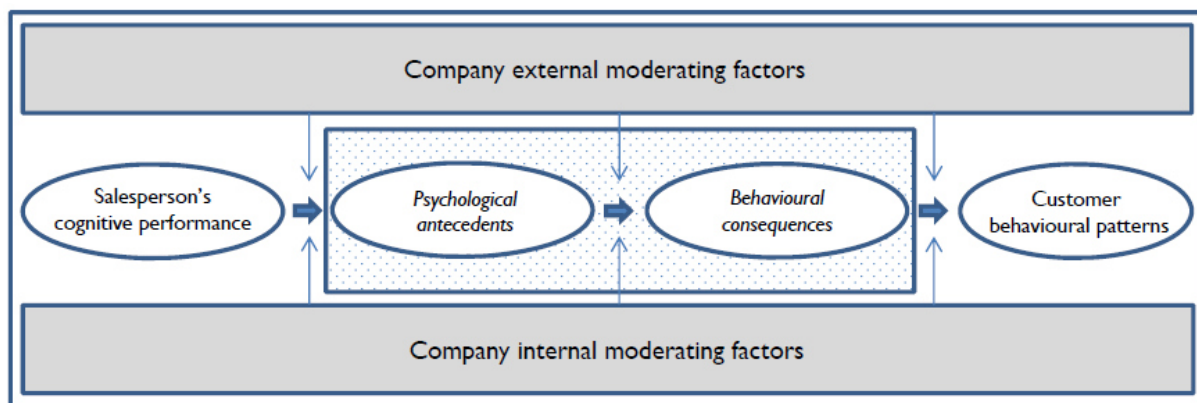
Source: adapted from Bruhn (2013)

Furthermore, Bruhn (2013) argued in his *success chain* (Figure 9) that the control of relationship marketing mainly concerns its effects and consequences. He defined what he termed as a pre-economic evaluation of effectiveness, which includes, trust, commitment and satisfaction, the most frequently mentioned dimensions of relationship quality in the literature (Beatson et al., 2008). In addition, Bruhn (2013) understood the pre-economic evaluation of effectiveness to be a transition from psychological effects to behavioural effects, which provides customer loyalty or retention, customer satisfaction and positive WOM, which aim to bring value for the buyer and seller parties.

Of the four steps involved, the two central and relevant steps for this current study are the *"psychological antecedents"*, which affect the resulting *"behavioural consequences"* and the customer behavioural patterns. These psychological antecedents can be influenced by the salesperson and his cognitive performance (Dietvorst et al., 2009). The salesperson's cognitive performance creates psychological effects in the customer's mind which have a major impact on the customer's cooperative, loyal and referral behaviour and ultimately lead to purchases, repurchases and WOM referrals (Palmatier, 2008). In time, the latest findings of social cognitive neuroscience can be applied to the relationship marketing process

because a dimension is added which explains what happens in the customer's brain while a salesperson is influencing the customer's mind. This means the explanation of the unconscious human brain process can be added to the salesperson-customer interaction (O'Connell et al., 2011).

Such processes where the salesperson can positively address the customer's mind would have a significant impact on the desired customer behaviour they would cause. It could therefore be argued that relationship marketing explains the kind of behavioural effects that these psychological antecedents may have, while neuroscience may explain how the customer's mind reacts and what kind of brain areas are activated during the different actions in the process. This may lead to a further refinement of parts of the relationship marketing process because the different strategic and operational steps in the relationship marketing process can be further refined and broken down into smaller level models to include the different human brain areas that are activated during the customer's decision-making process (Section 2.2.6).

The strategic and operational objectives in the relationship marketing process such as *"entering a new market", "developing a new product or technology"* or *"serving new needs of customers"* and *"reduction of distribution costs", "streamlining order processing and inventory management"* or *"reducing customer acquisition costs"* are crucial parameters in the relationship marketing process (Sheth et al., 2012, p. 11). In order to integrate these objectives, Palmatier (2008), who examined relationship marketing and its processes over a period of six decades, included all theoretical contributions in his perspective. He defined four steps, coupling relationship marketing with financial outcomes. With the definition of these four steps in a causal chain, he also provided a basis to incorporate the latest findings from neuroscience. He defined relational assets and relational behaviours, which are also being investigated by neuroscientists these days. Thus, to put it in a nutshell, the latest neuroscientific findings should be incorporated into the relationship marketing process to provide further options to generate positive financial outcomes (Sheth et al., 2012).

Admittedly, money is generally where the major source of income lies in the sales of products and services. Sales management is always about selling and generating profit and earnings from products and services. This is the only way that a company can successfully develop new products or services, and, if the marketing strategy is adequate, successfully offer them within existing and new markets (Mintzberg, Ahlstrand, & Lampel, 2009).

In bringing together the pre-economic evaluation of effectiveness (trust, commitment and satisfaction) and the economic thoughts (generating revenue, achieving profit and reducing transaction costs), it appears that soft and hard factors (Winkelmann, 2008) have to be combined to define the salesperson's cognitive performance (Section 2.2.5). These soft and hard factors will have an influence on the relationship quality in salesperson-customer dyads (Section 3.3.1).

3.3.1 Relationship Quality in Salesperson-Customer Dyads

The discussion in the earlier sections of this chapter shows that relationship quality is an important construct within relationship marketing and its processes (Boles, Johnson, et al., 2000; Parasuraman et al., 1991; Rauyruen & Miller, 2007). Relationship quality involves the customer's subjective assessment of the entire business relationship according to his requirements (Beatson et al., 2008). A high-quality relationship facilitates the exchange of resources as well as the relational aspects between the buyer and seller companies (Geiger & Turley, 2005). This is crucial because any uncertainties in the exchange may be reduced by the relational aspects (Winkelmann, 2008).

The quality of the personal relationship between the customer and the individual salesperson has often been discussed within the topic of relationship quality (Brashear et al., 2003; Newell et al., 2011). This stems from the fact that the salesperson has the most important role and responsibilities in the building of a long-term salesperson-customer relationship (Bradford et al., 2009). Personal relationship aspects refer to non-business-related interactions (Geiger & Turley, 2005), which can be divided into consultative task behaviour focusing on problem solving (Liu & Leach, 2001), and personal relationship behaviours focusing on the welfare of the customer (Geiger & Turley, 2005). Both behaviours are important and influence the relationship quality between a salesperson and his customer.

In Figure 10, the connection between the relationship quality and its components of trust, commitment and satisfaction within the characteristics of a long-term salesperson-customer relationship is shown.

Figure 10: Components of Relationship Quality
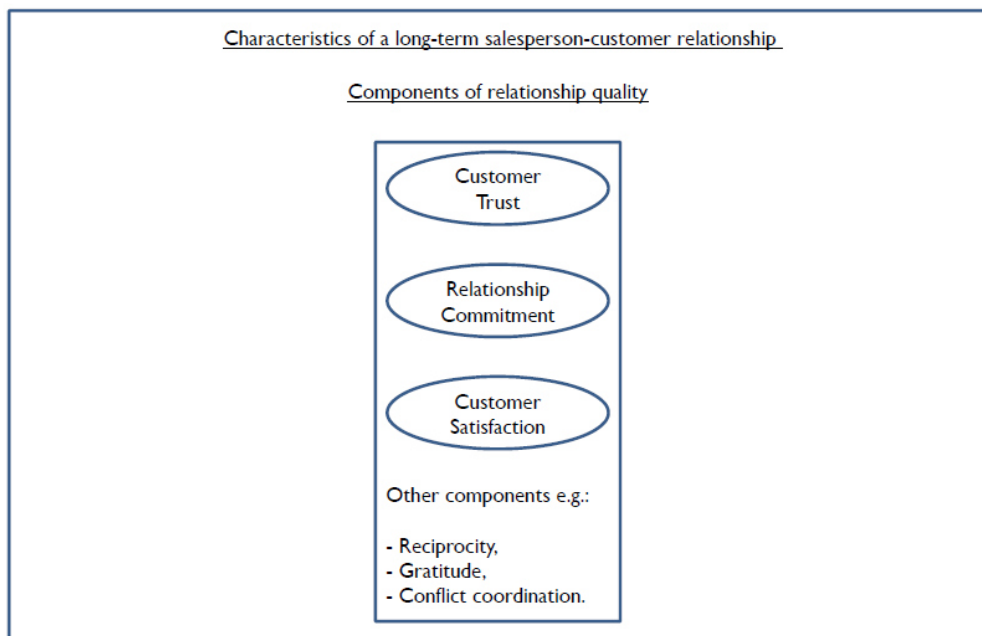
There is general agreement in the literature that relationship quality can be conceptualised through the most frequently identified components, i.e. the dimensions of trust, commitment and satisfaction (Beatson et al., 2008; Dwyer et al., 1987; Morgan & Hunt, 1994; Rauyruen & Miller, 2007; Storbacka, Strandvik, & Grönroos, 1994). This implies that a high-quality relationship results from elevated levels of trust, commitment and satisfaction (Wulf et al., 2001). However, many researchers agree that relationship quality is an overarching construct which may consist of several other components (François & Van Goolen, 2005) in addition to the aforementioned components. For example: trust in a salesperson (Crosby et al., 1990), perceived quality (Hennig-Thurau et al., 2002), customer orientation (Berry & Parasuraman, 1991), minimal opportunism (Dorsch et al., 1998), conflict coordination (Kumar, Scheer, & Steenkamp, 1995), and joint problem solving (Mohr & Spekman, 1994). If a high-quality relationship is maintained with customers, this will result in positive outcomes such as power and profit (Naudé & Buttle, 2000). To summarise, relationship quality is a key indicator for assessing a customer relationship (Winkelmann, 2008). Developing trust, achieving relationship commitment and ensuring customer satisfaction are central factors (Beatson et al., 2008) to improve cognitive and affective evaluation of the entire customer relationship (Winkelmann, 2008).

The following sections will address customer trust (Section 3.3.1.1), relationship commitment (Section 3.3.1.2) and customer satisfaction (Section 3.3.1.3).

3.3.1.1   Customer Trust

The most widely discussed component of relationship quality is undoubtedly the nature of trust (Rauyruen & Miller, 2007), which is deemed a key component for building successful relationships (Hsieh & Hiang, 2004). Trust is also built over time, so it is only part of a long-term relationship (Ahearne et al., 2007; Crosby et al., 1990; Liu & Leach, 2001; Morgan & Hunt, 1994). As mentioned in Section 2.2.5, trust plays a major role in long-term salesperson-customer relationships because such relationships are usually accompanied by uncertainty and risk. Uncertainty and risk cannot be eliminated in a short time because they relate to mental states which need to be changed. Positive interactions must occur over time if trust is to develop (Holmes, 1991; Rempel, Holmes, & Zanna, 1985; Weber et al., 2005). Therefore, interpersonal reward situations can be considered positive interactions over a specific time period and thus crucial to all interpersonal relationships (Weber et al., 2005) (Section 2.2.4).

Rousseau et al. (1998, p. 395) defined trust as the *"psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another"*. Falcone and Castelfranchi (2001) defined trust as a *"mental state, a complex mental attitude of an agent x towards another agent y about the behaviour/action relevant for the result (goal)"*. Trust, in particular interpersonal trust, between a salesperson and a customer forms the basis for a successful relationship. Thus, the definition of interpersonal trust may be assumed to be *"a willingness to accept vulnerability or risk based on expectations regarding another person's behavior"* (Borum, 2010, p. 2). This definition ideally supplements the definition of the

"psychological state" (Rousseau et al., 1998, p. 395). It is ideal because Rousseau et al. (1998) based their definition on earlier studies in which the knowledge and findings of neuroscience was not available, whereas Borum (2010) already incorporated some of the latest neuroscientific findings in his definition of trust.

It turns out that trust can be viewed as a psychological state (Rousseau et al., 1998) or as a mental state (Falcone & Castelfranchi, 2001). In general, the definition of trust includes various elements such as (1) a subject, (2) an action/behaviour, (3) a future action, (4) an expectation and (5) a belief (Castaldo, 2007). In a sales context, the subject of trust can be both the salesperson or the customer. In the case of the subject, many studies refer to an action or behaviour, based on the fact that the salesperson acts in such a manner that the customer can expect positive results. Future action refers to intention, thereby emphasising that the salesperson will act according to customer expectations. Trust in a salesperson will be defined as:

> A psychological state-of-mind (Rousseau et al., 1998) characterised by a disposition to admit vulnerability or risk (Borum, 2010) on the basis that the salesperson (context of this study) will act according to the self-assured customer's (context of this study) expectations (Dimoka, 2010).

This definition of trust includes all aspects which fall within the scope of this study as per the latest neuroscientific findings. Firstly, it focuses on the customer's state-of-mind. This state-of-mind is reflected in the psychological definition of Rousseau et al. (1998). Secondly, it is about how the customer's mental signals can be recognised by the salesperson's cognitive performance, which leads to the customer behaviours of cooperation, loyalty and referrals. Thirdly, the presence of vulnerability and risk on the customer's side, which is needed to allow trust to develop (Borum, 2010), and finally, the customer's expectations that the trust he has given the salesperson will not be abused. The salesperson must always be aware of these four elements which define trust. He must know how to react to biopsychosocial signals emanating from the customer's state-of-mind so that a long-term salesperson-customer relationship can be established, developed and maintained.

Trust was originally viewed solely as the affective component of a person or a subject (Castaldo, 2003). The one-dimensional view was later perceived as a three-dimensional construct with cognitive, affective and conative dimensions: the opinion about the object translates into the cognitive dimension, the feelings and preferences define the affective dimension, and behaviour and intentions form the conative dimension (Bruhn, 2013). The multi-dimensional construct is generally viewed with the same dimensions (Cummings & Bromiley, 1996). The cognitive component refers by and large to the rational component of trust. The affective component largely alludes to the mood between the two parties, and the third behavioural component points to *the willingness to act and to the transformation of trust into coherent behavior"* (Castaldo, 2003, p. 12). The main reason for this distinction lies in the identification of the different determinants among the existing multiple processes (McAllister, 1995). After Castaldo (2003) examined the conceptual nature, the different dimensions and the different typology of trust, he then summarised the various dimensions

under cognitive, emotional and behavioural aspects. The investigation of the social, cognitive and neural levels is the point where neuroscience starts to explore which brain processes are active in different situations where salesperson-customer interaction takes place (Section 2.2.2).

In taking the specific salesperson-customer view, Swan et al. (1999) investigated customer trust in a salesperson. In their argument, the cognitive component characterises the belief that a salesperson has skills and motivation. The affective component defines the feelings of certainty and uncertainty, which depend on the salesperson. In her study on trust and distrust and the brain regions associated with these concepts, Dimoka (2010) viewed trust from a buyer-seller perspective as a two-dimensional construct involving credibility and benevolence. However, Borum (2010)'s view was based on a clear three-dimensional construct, citing ability, benevolence and integrity. These predictor variables are not understood as dimensions, but rather perceived as determinants of trust, despite being used widely as analytical dimensions (Castaldo, 2007).

McAllister (1995) examined affect- and cognition-based trust as foundations for interpersonal cooperation in organisations, and concluded that both dimensions are required for trust to grow. Morgan and Hunt (1994) included the cognitive dimension to investigate trust and commitment. However, Borum (2010) firmly believed that ability, benevolence and integrity have the potential to represent all three dimensions (cognitive, affective and conative) of trust. Ability reflects competence and consistency, and can be connected to the cognitive dimension. Benevolence mirrors goodwill, and empathy can be associated with the affective dimension. Integrity reflects a future action in respect to fairness and honesty, and is related to the conative level. Therefore, in the context of customer trust in a salesperson, whether this involves one- or multi-dimensional constructs, the cognitive, affective and conative dimensions exist and must be incorporated into the trust investigations.

In the interpersonal context of a salesperson-customer relationship, behavioural outcomes (consequences) such as the purchase and repurchase intention and positive WOM are obviously those factors which have a decisive influence. Oliver (1999) believed that the conative dimension of attention is connected to intentions in general. These can be intentions to purchase, repurchase or to recommend, which are actually the most important goals for a salesperson before signing a contract with a customer. Whereas the affective dimension, seemingly the most uncontrollable of the three dimensions, mainly refers to feelings, the cognitive dimension is a very important element in process and strategy definitions. The conative level is a logical conclusion of the two other levels. McAllister (1995) suggested that both the cognitive and the affective level have a strategic importance in the context.

In terms of behavioural inputs (antecedents), Liu and Leach (2001) argued that trust in a salesperson and their perceived expertise are necessary factors for holistic customer satisfaction. In addition to that, they found that the salesperson's position in the supplier company and the perceived quality of the interactions with the salesperson are crucial to build the perceived expertise. Thus, trust in a salesperson and his perceived expertise have a

direct influence on a customer's satisfaction with the salesperson and the supplier (Liu & Leach, 2001). The personal relationship behaviour of a salesperson significantly affects the buyer's perceptions of trust and loyalty (Newell et al., 2011). Furthermore, relationship quality is very closely connected with the salesperson's service behaviour. Ahearne et al. (2007, p. 612) found that *"diligence, information, communication and inducements"* directly affect customer satisfaction. Arguably, satisfaction has a direct impact on trust in a salesperson (Ahearne et al., 2007). In fact, all these studies show how much a salesperson's expertise, proximity, appearance and the first impressions he generates can influence a customer.

In conclusion, behavioural inputs (antecedents) can be summarised under the term *'salesperson's personal characteristics'*, which create the perception of trust on the customer's die. The controversial term *'influenced charactersistics'* depends greatly on external circumstances. These two terms are derived from the theoretical approach of Geiger and Turley (2005), who stated that personal relationship behaviours are non-business-related interactions and help to foster a better understanding of each other's personal attributes and experiences. Research examining buyer-seller relationships indicates that trust between business partners increases the quality of the relationship and ambitions of doing joint further business (Crosby et al., 1990; Morgan & Hunt, 1994). A customer will only continue to provide helpful information when trust between the two parties is developed and given (Liu & Leach, 2001).

3.3.1.2   Relationship Commitment

Another important component of relationship quality frequently discussed in the relationship marketing literature (Garbarino & Johnson, 1999) is the construct of commitment (Hennig-Thurau et al., 2002). As in the case of trust, commitment is an essential component for building successful relationships (Gundlach, Achrol, & Mentzer, 1995) and is therefore related to the long-term perspective in a salesperson-customer relationship (François & Van Goolen, 2005). Relationship commitment can be viewed as the focal point for understanding the stability of a customer relationship (Hunt, Arnett, & Madhavaram, 2006), and is a meaningful reference when assessing the quality of a relationship (Gundlach et al., 1995). In addition, relationship commitment is a useful construct for estimating the likelihood of loyalty. The more committed a customer is, the more loyal he is likely to be towards the seller company (Malhotra, Agarwal, & Ndubisi, 2010).

Commitment can be defined as *"an enduring desire to maintain a valued relationship"* (Malhotra et al., 2010, p. 20). In this sense, relationship commitment refers to the inner bond of loyalty and its expression in the form of a particular type of behaviour towards a person, group or community. It also expresses the desire to continue valuable relational exchanges and shows that effort is being made to maintain these exchanges (François & Van Goolen, 2005). In terms of conceptualising commitment, the literature yields different variations of commitment. As an example, Johnson (1991) reported that commitment can be subdivided into structural, personal and moral commitment, whereas Gundlach et al. (1995) investigated instrumental, attitudinal, and temporal commitment. Instrumental commitment means that

the customer believes that no other offer and related services could better meet his requirements. Attitudinal commitment refers to a behavioural intention to foster an inter-company or interpersonal relationship. Temporal commitment is long-term in nature as it aims to achieve mutual benefits.

In the past, researchers such as Morgan and Hunt (1994) studied the concept of the commitment to a relationship in depth. They discussed five precursors to relationship commitment: (1) relationship termination costs, (2) relationship benefits, (3) shared values, (4) communication and (5) opportunistic behaviour. On the one hand, there is a direct influence on commitment through (1) relationship termination costs and (2) relationship benefits. On the other hand, (3) shared values have an influence on commitment and trust, and (4) communication and (5) opportunistic behaviour indirectly influence commitment through trust. This in turn supports the argument that trust is directly related to commitment.

Nowadays, relationship commitment is a more appropriate measure for relationship development (Crutchfield & Morgan, 2010); on the other hand, trust requires behaviour in which the long-term interests of a customer are met (Palmatier, Dant, Grewal, & Houston, 2007). Commitment has a stronger influence at the beginning of a salesperson-customer relationship, while the attribute of trust is more important in the long run. In supporting this view, Palmatier (2008) and Palmatier, Dant, et al. (2007), who investigated commitment and trust, argued that commitment and trust do not have the same life cycle. They showed this dependency on the basis of positive and negative relational velocity within the commitment-trust relationship life cycle. Palmatier (2008) and Palmatier, Dant, et al. (2007) reported that trust grows continuously over a period of six years, whereas commitment reaches its zenith after four years and then tends to fall.

In conclusion, relationship commitment is an important psychological factor that needs to be considered when defining the relationship quality in a long-term salesperson-customer relationship (Bruhn, 2013). If a salesperson displays credibility and trustworthiness (Jones, Moore, Stanaland, & Wyatt, 1998), the resulting benefit is customer satisfaction with and loyalty to the supplier (Liu & Leach, 2001) as well as an intention to purchase (Lacey, 2007). This still remains one of a salesperson's and a sales organisation's central goals. Razzaque and Tan Gay Boon (2003) argued that the greater the level of a buyer's trust in a supplier and a salesperson is, the greater the buyer's commitment to the supplier will be and the more a customer will be satisfied.

3.3.1.3 Customer Satisfaction

Customer satisfaction is the result of a complex mental comparison that determines how products or services provided by the seller company meet the buyer's expectations (Winkelmann, 2008). These mental activities always include affective and cognitive components (Wen & Geng-qing Chi, 2013). For this reason, Winkelmann (2008) defined customer satisfaction as the comparative process between customer expectations and the

salesperson's effective performance, which can be in the form of product or service quality and expectations. These expectations can relate to desires, ideals or experiences. Hence, customer satisfaction refers to the fulfilment or exceedance of customer expectations (Bruhn, 2013). However, it is a challenge to fulfil customer expectations and to achieve customer satisfaction in the process. To date, researchers and practitioners have still not agreed on a common definition for satisfaction which is in line with Reichheld, Markey Jr, and Hopton (2000)'s view of it as an inherently unstable and temporary mental state. Nevertheless, researchers and practitioners, e.g. Wangenheim and Bayón (2007), agree that satisfaction is an essential requirement for the definition of relationship quality and therefore to positively influence repurchases, WOM and increase the customer's willingness to pay a higher price for a product or a service. Repurchases, positive WOM and the like are all aspects which are discussed in connection with the development of a long-term salesperson-customer relationship.

The scientific basis of satisfaction lies in the traditional Confirmation/Disconfirmation Paradigm, which claims that satisfaction can only occur if the seller's performance meets the customer's minimum expectations (Oliver, 2010). This static approach was extended by Palmatier, Dant, Grewal, and Evans (2006) into a dynamic approach defining customer satisfaction as relationship satisfaction cumulative with experiences over time.

Earlier, the static approach described three levels of satisfaction (Liu & Leach, 2001): (1) customers who are dissatisfied tend to search more actively for other business partners and are more willing to leave the current unsatisfactory partnership, (2) customers who are partly satisfied tend to stay in the business relationship but are not committed and will change to an alternative when a better opportunity presents itself, and (3) satisfied or even delighted customers who feel that their expectations have been exceeded will be completely loyal to the partnership.

Contrary, the dynamic approach draws on five levels to define customer satisfaction (Bruhn, 2013): (1) the *"demanding satisfied"*, (2) the *"stable satisfied"*, (3) the *"resignation satisfied"*, (4) the *"stable dissatisfied"* and (5) the *"demanding dissatisfied"*. Thus, all these levels of satisfaction represent a different mental state, communicated by different signals which must be detected by the salesperson. According to Palmatier (2008), if the customer's initial experiences are positive and the desired outcomes are generated, the relationship grows, and the attributes of acceptance, trust, commitment and positive attitude are predominant, which leads to customer satisfaction (Winkelmann, 2008). Hence, customer satisfaction is only achieved after the customer and the salesperson have interacted for a certain period, once the basic principles of commitment and trust have already been established. This means customer trust, relationship commitment and customer satisfaction are very important factors when it comes to the development of a long-term salesperson-customer relationship.

Thus, one of the main goals in achieving high-quality relationships is to have satisfied customers, which may result in a long-term salesperson-customer relationship (Crutchfield & Morgan, 2010). During this process, satisfaction is highly dependent on the mental state of the exchange partners (Dimoka et al., 2007). Furthermore, the affective and the cognitive

states of a customer are very important if a relationship is going to develop into a long-term salesperson-customer relationship (Wen & Geng-qing Chi, 2013). In highlighting the customer's affective and cognitive mental state, the new area of social cognitive neuroscience research may add to the body of knowledge. In particular, neuroscience can provide the explanation of the dual-process framework, which describes on the one side the affective state (automatic social cognition) and on the other side the cognitive (controlled social cognition) (Dietvorst et al., 2009).

3.3.2   Consequences of Relationship Quality

Section 3.3.1 emphasised that the success of a long-term salesperson-customer relationship can be assessed with the concept of relationship quality and its most important components, namely trust, commitment and satisfaction (François & Van Goolen, 2005; Rauyruen & Miller, 2007). These three components of customer trust (Section 3.3.1.2), relationship commitment (Section 3.3.1.2) and customer satisfaction (Section 3.3.1.3) have a significant impact on the behavioural consequences of a high-quality relationship between a salesperson and his customer. Researchers and practitioners are not only interested in defining and assessing the relationship quality but also in the behavioural consequences of these relationships (Beatson et al., 2008).

The marketing literature has frequently discussed the behavioural consequences of relationship quality. Boles, Johnson, et al. (2000) found that a high-quality relationship is positively related to sales effectiveness, leading to more revenue for the company through increased customer acquisitions and more purchases of products and services. The salesperson and customer need to collaborate to generate revenue and profits. The pursuit of increased value for the customer results in cooperative sales behaviour (Biong & Selnes, 1995). This in turn results in increased customer purchase intention (Palmatier, 2008). Therefore, cooperative behaviour between the salesperson and the customer leads to purchase intention.

In addition to increased purchase intention, two other positive behavioural consequences of relationship quality, namely repurchase intention and positive WOM, are frequently discussed in the literature (Hennig-Thurau et al., 2002). Furthermore, Rauyruen and Miller (2007), for example, suggested that the consequence of trust is customer loyalty. They added that a high level of commitment also leads to loyalty, and they emphasised the link between customer satisfaction and loyalty. Therefore, as already highlighted, all of these components can contribute to a high-quality relationship (Beatson et al., 2008; Dwyer et al., 1987; Morgan & Hunt, 1994; Rauyruen & Miller, 2007; Storbacka et al., 1994) and the desired general behavioural consequences of power and profit. Thus, these two behavioural consequences of power and profit lead to two behavioural outcomes of relationship quality, namely to repurchase behaviour and to positive WOM (Hennig-Thurau et al., 2002). This means that a high-quality relationship leads to repurchases and positive WOM. For this reason, we can conclude that trust, commitment and satisfaction are central goals when developing a long-term salesperson-customer relationship (Crutchfield & Morgan, 2010),

because they lead to repurchases and positive WOM, and in turn to potential new customers and further initial purchases.

Developing customer trust, achieving relationship commitment and ensuring customer satisfaction are not only key factors in the definition of the relationship quality (Beatson et al., 2008); they also contribute positively to cooperative, loyal and referral behaviour on the part of the customer, which in turn, leads to positive purchase, repurchase intentions and positive WOM (Palmatier, 2008). This connection between relationship quality and behavioural consequences is illustrated in Figure 11.

Figure 11: Behavioural Consequences
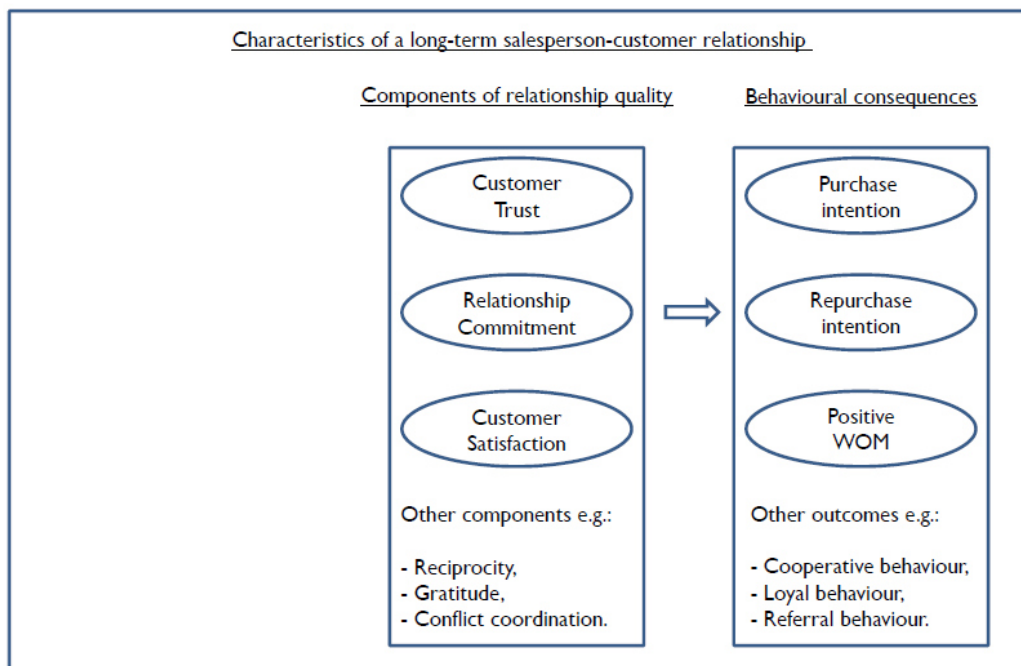
Source: Author

The following sections will discuss the role of cooperative behaviour leading to the intention to purchase (Section 3.3.2.1), relational loyalty leading to the intention to repurchase (Section 3.3.2.2) and positive WOM leading to new customers (Section 3.3.2.3).

3.3.2.1   Cooperative Behaviour Leading to Purchases

As discussed in Section 3.3.2, cooperative behaviour between a salesperson and his customer may lead to a positive purchase intention. Cooperation occurs when two or more parties work towards a mutually advantageous result which promises revenue or added value for the parties involved (Borum, 2010). Tabibnia and Lieberman (2007) defined cooperative behaviour as acting collaboratively to maximise public interests rather than acting individually to maximise personal interests. This definition follows the perspective of affective influence within a collaborative approach. This affective influence is based on a person's mood and it is predominantly individual in nature. Cooperative behaviour requires

the renunciation of self-interest, which assists in bringing one closer to the interests of the other person. Bruhn (2013, p. 316) investigated the cooperative potential of the customer as one of the four levels of customer evaluation which he specified in his model of the *"Customer Lifetime Value"*. He defined cooperative behaviour as the willingness and the ability of a customer to introduce himself or his material or immaterial goods into the production process. This approach to cooperation demonstrates exactly how essential integration and cooperation are in the B2B sector with complex and customised products and services. Hence, cooperation not only needs the renunciation of self-interest but also includes the tangible and intangible knowledge transfer from the buyer to the seller company, and vice versa. This kind of self-motivated knowledge transfer may result in a decisive competitive advantage over one's competitors (Mathews, 2003).

McAllister (1995) highlighted the importance of affective and cognitive elements for interpersonal cooperation. In the context of interpersonal cooperation, Borum (2010) referred to a cognitive process which is only beneficial if reciprocated. Palmatier (2008) argued that initial positive experiences lead to the development of a positive collaborative relationship between the customer and the salesperson. Hence, with these initially positive experiences, it becomes evident that the customer intends to cooperate with the salesperson (Swan et al., 1999). Moreover, Squire, Cousins, and Brown (2009) investigated cooperation and knowledge transfer in buyer-seller relationships and concluded that increased levels of cooperation result in greater knowledge transfer. This knowledge transfer is very important for a salesperson to achieve a common goal, and also to acquire the necessary relevant information related to a deal. Furthermore, Squire et al. (2009) added the interesting aspect of trust and a salesperson's performance. Trust fosters the customer's willingness to share information and at the same time, the likelihood of a switch in the customer's intentions is reduced.

From this perspective, it appears that relational factors such as trust and commitment facilitate cooperative behaviour (Edison, Hunt, & Madhavaram, 2007; Morgan & Hunt, 1994). A high-quality relationship contributes to cooperative behaviour where the salesperson and the customer are working towards a common goal. In a meta-analysis, Castaldo (2007) synthesised a trust-cycle and suggested that cooperation is both an antecedent and a consequence of trust. His trust interpretative model is based on past experience, which has an impact on cognitive antecedents such as skills/competences, non-opportunistic motivation and integrity and value identity. These cognitive attributes generate and activate the trust-building process. This process in turn increases cognitive consequences such as commitment, uncertainty and conflict reduction. Therefore, the behavioural consequence of cooperation may take on the form of, for example, providing suggestions and information that may improve a potential proposal. This cycle not only reflects the behavioural consequence of cooperation but also the purchase intention and the purchase itself (Castaldo, 2007).

In the industrial goods sector in particular, where long-term relationships have to be maintained, the cooperation potential of a customer is systematically recorded in the form of customer evaluation (Bruhn, 2013). In saying this, Bruhn (2013) took on more of a marketing point of view, whereas Castaldo (2007) represented more of a psychological point

of view with his trust perspective. These two views are complemented and strengthened by social cognitive neuroscience as scientists in this field have discovered that cooperation activates a neural process in the brain which includes the brain networks of the human reward system (Rilling et al., 2002). This in turn causes trustworthy behaviour and fosters relational bonding (Decety et al., 2004).

Cooperation is essential and must be shown both by the salesperson and the customer. That cooperation can be seen as a cognitive antecedent and a behavioural consequence is supported by Rilling et al. (2002) in their investigation on the neural basis of social cooperation, which was carried out in the context of reciprocal altruism. In addition to that, cooperation significantly influences the trust-building process (Castaldo, 2007) and therefore the development of a long-term salesperson-customer relationship.

3.3.2.2   Relational Loyalty Leading to Repurchases

Winkelmann (2008) defined loyalty as a voluntary commitment to a product, a brand, a salesperson, a seller company or a preferred distributor. Unlike Palmatier (2008), he stressed that loyalty is not only shown in the intention to repurchase but also in the act itself. Relational loyalty includes cognitive, affective and conative components of attitudes (Pryor, Malshe, & Paradise, 2013). The cognitive component presents the thoughts and beliefs about an object, and includes explicit knowledge about a product. The affective component encompasses the feelings, moods and emotional reactions of customers towards a product. Finally, the conative component constitutes behavioural intentions such as repurchases or positive WOM (Matthews et al., 2014).

As discussed in Section 3.3.2, loyal customer behaviour may lead to the repurchase intention and to positive WOM. Loyalty represents the customer's intention to continue to conduct business with the seller company after the initial purchase has been made (Palmatier, Scheer, & Steenkamp, 2007). In the salesperson-customer context, Palmatier (2008) distinguished between three types of loyalty: (1) salesperson-owned loyalty, in which the customer indicates his willingness to continue to do business with the particular salesperson in question, (2) seller-owned loyalty, which is independent of the particular salesperson and more seller-oriented in nature, and (3) synergistic loyalty, which is independent of the particular salesperson and the seller company, but focuses instead on the possible customer benefits resulting from the repurchase.

Relational loyalty is a strong indicator of satisfaction, which is dependent on the relationship quality between a salespeople and his customer, and therefore on the long-term seller company value (Winkelmann, 2008). Satisfied or even delighted customers who feel that their expectations with a purchase have been exceeded (Section 3.3.1.3) may be loyal customers to the business relationship and tend to repurchase (Liu & Leach, 2001). Winkelmann (2008) viewed customer retention as a notable result of customer loyalty. Customer retention covers all activities which encourage the customer not to buy from the competition. This loyalty bond incorporates three layers (Stahl, 2009): (1) a resilient form of

customer loyalty in which the customer commits to the relationship, the company and the products, (2) conditional customer loyalty and therefore a tacitly received customer loyalty, and (3) superficial customer loyalty in which the seller relies on the repurchase intentions of the buyer.

In the salesperson-customer context, Newell et al. (2011) argued that the face-to-face relationship behaviour of a salesperson has a significant effect on buyer perceptions of trust in a salesperson and customer loyalty. They called these activities consultative and personal relationship behaviours. Guenzi and Georges (2010) investigated the impact of customer trust in the salesperson on loyalty and found that trust plays a major role in the customer's intention to repurchase and to recommend, and saw customer loyalty as one of the major consequences of trust. These results fully support the concepts of trust, satisfaction and loyalty as depicted in the consolidated view of Castaldo (2007). Several of his studies illustrated the dual dimensions of cognitive and affective loyalty and led to the empirical confirmation of the casual relationship between trust, loyalty, economic and competitive.

Loyalty depends on the quality of the relationship between a salesperson and his customer. This means that relational loyalty depends on customer trust, relationship commitment and whether a customer is satisfied or even delighted. It also suggests that future customer retention strategies should include conscious and unconscious human brain processes which are related to customer behaviour (Bruhn, 2013), such as trust, commitment, satisfaction and positive attitude (Winkelmann, 2008). In addition to that, future customer retention strategies should still include economic factors such as the product, brand and pricing structure (Palmatier, 2008). The cognitive, affective and conative components of loyalty have a significant influence on the mental state of a customer in the decision to continue purchasing products and services, and therefore to develop a long-term salesperson-customer relationship (Wen & Geng-qing Chi, 2013). For this reason, it can be argued that social cognitive neuroscience research can increase the already existing body of knowledge, particularly with regards to the explanation of the mental state between two interacting parties, and shed light on the psychological and unconscious brain processes of a customer (Dietvorst et al., 2009).

3.3.2.3   Positive WOM Leading to New Customers

Bruhn (2013) defined WOM as an informal, positive or negative expression of opinion between customers about products, services, brands, companies or salespeople. He stated that WOM communication between customers results in an increase in cognitive, affective and conative goals in the mind of the individual who receives the recommendation, and that this will ultimately have a positive influence on the economic objectives of income, financial return, revenue and cost reductions. Hence, WOM leads to an emotional behavioural effect on the target group.

According to Biyalogorsky, Gerstner, and Libai (2000), positive WOM occurs when a customer is not only satisfied but also delighted with the purchased or repurchased product

or quality of the service that he has received. They define a delighted customer as someone who experiences a positive level of surprise that exceeds all his expectations, thus resulting in a positive emotional response. Positive WOM results from a positive customer attitude and when a customer is committed to the company and emotionally connected to the salesperson (Homburg, Becker, & Hentschel, 2010). Therefore, negative WOM is equivalent to a purchase warning and accordingly, it includes a negative customer attitude (Markert, 2008).

Zeithaml, Berry, and Parasuraman (1996) noted that WOM is strongly coupled with customer loyalty. Customers who not only maintain their relationship with the salesperson and the company but also recommend the products and services of the salesperson and company are deemed to be particularly loyal customers (Bruhn, 2013). The true objectives of recommendations are often psychologically motivated and tend to be based on the communicator itself (Bruhn, 2013). In many cases, WOM serves as the self-expression of the recommending person (Markert, 2008). The fact that WOM referrals take place face-to-face and are therefore largely cognitive-driven underline the findings in Buttle (1998)'s study, in which he studied the antecedents and consequences of WOM. Buttle (1998) characterised and conceptualised WOM by valence, focus, timing, solicitation and the degree of management intervention. He constructed a link between customer expectation and perception which may lead to dissatisfied, satisfied or delighted customers and accordingly, to the respective outcome.

Wangenheim and Bayón (2007) investigated the connection between satisfaction, WOM and customer acquisition and concluded that new customer acquisitions are affected by WOM, which in turn is affected by satisfaction. Thus, positive WOM is a powerful tool to acquire new customers, also because it reduces uncertainty. This is confirmed by Schumann et al. (2010), who investigated the effect of WOM in service marketing. The insight delivered by this study was that positive WOM on service quality reduces uncertainty among existing customers. It is this reduction in uncertainty which is central for the current study, as one of a salesperson's main responsibilities is to reduce uncertainties in the various customer contact phases.

A satisfied customer has to be won over if a salesperson is to successfully generate positive WOM referrals (Biyalogorsky et al., 2000), which can lead to new customer acquisitions (Wangenheim & Bayón, 2007). Positive WOM is therefore one of the top goals of the salesperson's cognitive performance. In addition to that, positive WOM is the desired result of a high-quality relationship. WOM again involves cognitive and affective components which cannot often be detected rationally (Bruhn, 2013). Neuroscience could help to visualise these unconscious components and to potentially explain what happens in a customer's brain when he passes on positive or negative WOM. This in turn could inform salespeople how they would need to trigger the customer's brain.

3.3.3　Antecedents of Relationship Quality

In Section 3.3.1, the concept of relationship quality was discussed in the context of long-term salesperson-customer dyads. Considering the fact that relationship quality is a key indicator for assessing a customer relationship (Winkelmann, 2008) and that developing trust, achieving relationship commitment and ensuring customer satisfaction are key components (Beatson et al., 2008), researchers and practitioners need to ask themselves how these components can be influenced to generate a high-quality relationship. As mentioned in Section 3.3.2, a high-quality relationship may lead to behavioural consequences such as purchase and repurchase intentions, and positive WOM (Palmatier, 2008).

Recent studies, such as the one carried out by Beatson et al. (2008), concluded that similar behaviours between employees and customers positively affect relationship quality. In addition to that, several antecedents of relationship quality such as relational selling behaviour (Crosby et al., 1990), customer orientation (Wray, Palmer, & Bejou, 1994), relationship investment (Wulf et al., 2001) or the customer's perception of service orientation (Beatson et al., 2008) were investigated. Palmatier et al. (2006) highlighted customer-focused determinants: benefits and dependence, seller-focused determinants: investment and expertise and finally, dyadic-determinants: communication and similarity in behaviour. According to Palmatier et al. (2006), the antecedents which influence the relationship quality are relationship benefits, the seller's expertise and similarity. These three antecedents have a strong influence on relationship building, with expertise and communication being the most effective, followed by relationship investment, similarity and relationship benefits.

In the context of a long-term salesperson-customer relationship, in particular with the construct of trust as one of the key components of relationship quality, three primary concepts regularly appear in the literature. These are ability, benevolence and integrity (Mayer, Davis, & Schoorman, 1995; Peters et al., 1997; Schoorman, Mayer, & Davis, 2007; Vanneste, Puranam, & Kretschmer, 2013). Perceived ability, benevolence and integrity provide key information for the customer's decision-making process (Section 2.2.6) (Borum, 2010). Decision-making is required in the sales process itself, i.e. customer's decisions to finally purchase or repurchase a product or service, or the customer's decision to continue or terminate a relationship. Borum (2010) believed that many researchers view the decision-making process as two complementary processes, one being a cognitive process and the other being an affective process. However, McAllister (1995) and Mayer et al. (1995) argued that there are different views on the possible roles and relative contributions of cognitive and affective factors.

It is interesting to note that all these behavioural studies did not include the human reward system and how interpersonal reward situations can be produced in the customer's brain. Existing studies have investigated the consequences that these antecedents have on the relationship quality, but there has been no researched conducted into how these antecedents may affect the human reward system in the customer's brain to date. This lack of knowledge exemplifies the research gap identified by this study: existing studies have not included the unconscious components underlying the human reward system in salesperson-

customer relationships (Section 2.2.4). Once again, it can be argued that the neurological influence on the antecedents must be included in the discussion of the development of a long-term salesperson-customer relationship. When it comes to collecting, interpreting and reacting to signals that reflect the customer's current state-of-mind, the emerging science of social cognitive neuroscience can offer valuable assistance because it helps us to understand other minds and brain processes (Lieberman, 2007).

Developing customer trust, achieving relationship commitment and ensuring customer satisfaction are key factors in the definition of relationship quality (Beatson et al., 2008) (Figure 12).

Figure 12: Psychological Antecedents

Characteristics of a long-term salesperson-customer relationship

Psychological antecedents	Components of relationship quality	Behavioural consequences
Salesperson's competence	Customer Trust	Purchase intention
Customer's interests	Relationship Commitment	Repurchase intention
Relationship integrity	Customer Satisfaction	Positive WOM
Other antecedents e.g.: - Similar behaviours, - Relationship investment, - Service orientation.	Other components e.g.: - Reciprocity, - Gratitude, - Conflict coordination.	Other outcomes e.g.: - Cooperative behaviour, - Loyal behaviour, - Referral behaviour.

Source: Author

These key factors can be influenced by the salesperson's cognitive performance. The salesperson's cognitive performance may potentially impact on the antecedents to be identified within this study, which are especially essential for the development of a long-term salesperson-customer relationship because they include a cognitive precursor and a future action or intention. These antecedents are particularly relevant at the very beginning of a salesperson-customer relationship, because they set the direction for the further course of the interpersonal relationship. Since the success and failure of a customer relationship are so closely interrelated, it is vital that the salesperson pays meticulous attention at the beginning of the relationship: he must be fully focused on the customer, while initially consigning his own interests to the background (Petermann, 2013).

The following sections will discuss the antecedents of relationship quality: *"demonstrating the salesperson's competence"* (Section 3.3.3.1), *"protecting the customer's interests"* (Section 3.3.3.2) and *"maintaining integrity within the relationship"* (Section 3.3.3.3).

3.3.3.1 Demonstrating the Salesperson's Competence

The salesperson showing competence is an important antecedent of relationship quality, especially in the formation of trust in a salesperson (Backhaus, Evanschitzky, Michaelis, & Schneider, 2015), and is essential for the development of a long-term salesperson-customer relationship. The salesperson's competence describes how salespeople use their skills and their expertise to fulfil their relevant tasks (Palmatier, 2008). The generic term of competence includes ability, skills and expertise (Swan et al., 1999). It is about the customer relying on the salesperson, who has the ability to provide accurate information. This view is in line with Guenzi and Georges (2010), who defined expertise as the knowledge of a salesperson to provide competence and expertise in specific technical matters. In their study, they also used expertise and ability directly as trust-forming parameters. This was based on the assumption that perceived expertise is a predictor of customer trust in a salesperson, which improves the quality of the relationship in question (Beatson et al., 2008).

Hennig-Thurau (2004) investigated service employees and their customer orientation and found that technical skills have a decisive influence on customer satisfaction, emotional commitment and customer retention. Peters et al. (1997) proposed knowledge and expertise as factors which have a direct impact on competence and predictability. In their multidimensional conceptualisation of trust, Kasperson et al. (1992) regarded perceptions of competence as one of four key components of trust. Renn and Levine (1991) stated in their investigation of trust, in which they discovered that perceived competence is one of five components of trust, that they perceived competence as a degree of technical know-how associated with a message or a source.

From the above discussion and supported by the literature, in particular the view of Borum (2010), it appears that ability can be divided into the perception of competence (Peters et al., 1997), predictability (Kasperson et al., 1992) and consistency (Renn & Levine, 1991). Furthermore, ability not only influences trustworthiness and trust but also has a direct effect on customer satisfaction and relationship commitment (Hennig-Thurau, 2004). Relationship commitment and customer satisfaction have been found to be the most important components of the relationship quality between a salesperson and his customer (Section 3.3.1).

The salesperson's ability has a pivotal influence on this mental state and the respective brain regions since customer trust and satisfaction are highly dependent on the mental state of the exchange partners (Dimoka et al., 2007). To date, neuroscientists have been studying how these regions can be opened. Ability has a strong affinity with certainty because the more information a person, or in this case a customer, obtains from the salesperson, the more secure he feels in his decisions. This suggestion is in line with Lamar (2006), who stated that most people are very likely to make clear decisions in situations where they feel safe.

In reference to the current study, research encompasses the decision to cooperate, to purchase, to be loyal and possibly to repurchase or to aspire to referrals in the form of WOM. It is exactly here that Rock (2009) built on the reduction in uncertainty and the generation of future prospects in his leadership study, and suggested that security is

associated with a reward and uncertainty with a threat response in the brain of a human being. This idea will be explored in greater depth in Chapter 4, which will establish the connection with the insights from neuroscience and discuss the impact that the social domains of experience have on the customer's brain.

3.3.3.2 Protecting the Customer's Interests

Another psychological antecedent of relationship quality, especially in the formation of trust in a salesperson, is the motivation to protect the customer's interests (Swan et al., 1999). Customer-oriented salespeople actively go out of their way to protect their customer, which is also viewed as a form of benevolence (Schwepker Jr, 2003). In this view, benevolence is a dimension of customer trust in a salesperson, which in itself can be viewed as one of the most important components of relationship quality (Ganesan, 1994). He understands benevolence to be the "*belief that the other has motives beneficial to the target when new conditions arise for which a commitment was not made*" (Ganesan, 1994, p. 3). Within this understanding, benevolence focuses on the self-motivation of the commercial partners to be cooperative while the salesperson and the customer commit to each other.

In the same vein, Doney and Cannon (1997) described benevolence as "*the extent to which one partner is genuinely interested in the other partner's welfare and motivated to seek joint gain*" (Doney & Cannon, 1997, p. 36). Hence, both definitions proceed along common lines, in that they view benevolence in the context of a salesperson's goodwill and as an act of kindness on behalf of the salesperson. Renn and Levine (1991) highlighted the positive value of goodwill in their study on trustworthy attributes and defined perceived faith as an additional component of trust. Kasperson et al. (1992) identified this component as trust-caring. Peters et al. (1997) adopted terms such as caring and empathy. This means, benevolence is a predominantly salesperson-related driver (Guenzi & Georges, 2010).

Furthermore, Guenzi and Georges (2010) argued that benevolence is a substitute for customer orientation because it reflects the non-opportunistic behaviour of a salesperson (Schwepker Jr, 2003). Ganesan (1994) believed that benevolence encompasses friendship and sacrifices for the business partner. Hawes, Baker, and Strong (1993) integrated benevolence in their scales as a measure to explain the good and bad points of a salesperson's behaviour. When explaining his perspective, the salesperson requires competence, skills and expertise to create value for the customer (Swan et al., 1999). Hence, he requires ability and the knowledge to provide project-specific information. This suggests that ability (Section 3.3.3.1) and benevolence are interdependent.

As can be seen from the literature, e.g. Borum (2010), it is evident that benevolence is divided into the perception of caring (Kasperson et al., 1992), empathy (Peters et al., 1997) and goodwill (Renn & Levine, 1991). In the current study, benevolence is viewed from the customer's perception, i.e. how the customer interprets the salesperson's caring, empathy and goodwill. Thus, the salesperson is committed and motivated to protect the interests of the customer so that a long-term salesperson-customer relationship can be developed.

Nowadays, neuroscientists are investigating the key dimension of benevolence and examining the neural correlations in the human brain. Whereas credibility is more widely associated with the cognitive area in the brain, benevolence is more closely associated with the emotional or affective area of the human brain (Dimoka et al., 2007). Dimoka (2010) demonstrated in her study that benevolence activates a reward area in the human brain in the same way as ability does. This is further confirmed in the study of Riedl and Javor (2012), in which they integrated evidence from genetics, endocrinology, and functional brain imaging into the context. More evidence can be found in the leadership study conducted by Rock (2009), in which he depicted how to build a personal relationship to affect the reward region of the brain, which consequently leads to friendship. Within this leadership study, friendship is seen as relatedness between interacting people, which in turn symbolises benevolence. This idea will be discussed in greater depth in Chapter 4, which will establish the connection with neuroscience and explore the impact that the concepts discussed in Chapter 3 have on the customer's brain.

3.3.3.3   Maintaining Integrity within the Relationship

A third psychological antecedent of relationship quality is the level of integrity within the relationship between the salesperson and his customer (Standifer, Evans, & Dong, 2010). Integrity requires the salesperson to act honestly, fairly and to have the best interests of the customer at heart (Schwepker Jr, 2003). He must demonstrate integrity to build a relationship with the customer (Bateman & Valentine, 2015). For example, Swan et al. (1999) noted that integrity comes to the fore when there is an increase in the importance of trust and subsequently an increase in risk for the customer when the salesperson does not appear to be trustworthy. They further demonstrated that trust only becomes relevant if there is a risk that a lack of trustworthiness on the part of the salesperson will have negative consequences for the customer.

In their study on the perceptions of trust and credibility, Peters et al. (1997) investigated the perceptions of honesty and openness as predictors of integrity and therefore, the longevity of a salesperson-customer relationship. Together with the aforementioned attributes of ability (Section 3.3.3.1) and benevolence (Section 3.3.3.2), integrity accounts *"for a significant amount of variation in the perceptions of trust and credibility"* (Peters et al., 1997, p. 18).

Like Peters et al. (1997), Kasperson et al. (1992) attempted to explore key elements in risky communication in their study on social distrust. These are summarised as being a commitment to a goal. Similarly in risk communication, Renn and Levine (1991) investigated trust and credibility from the perspective of two opposing camps. The one side requires high economic growth, whereas the other side requires low or zero economic growth. Despite the obviously large gap between the two, both sides fall back on trust and credibility when communicating with the other parties. Based on these two expectations of high and low economic growth, Renn and Levine (1991) claimed that the behavioural traits of objectivity and fairness lead to trust, respectively to trustworthy situations. Hence, they proceeded to structure their understanding of trust along the lines of objectivity and fairness, among other

components. In the same way, Peters et al. (1997) examined the determinants of trust and credibility in risk communication and confirmed the parameters of dedication, commitment, honesty and openness. These results verify the findings of Kasperson et al. (1992), who suggested that commitment is a goal. Furthermore, the findings confirm the results of Renn and Levine (1991), who clearly showed in their literature review on credibility and trust that objectivity is a major element in risk communication for parties developing a trustful relationship.

Borum (2010) divided integrity into the perception of honesty and openness (Peters et al., 1997), objectivity and fairness (Renn & Levine, 1991), dedication, commitment, honesty and openness (Peters et al., 1997). For this current study, the focus is on the customer's perception of a salesperson's honesty, fairness, dedication and commitment.

Nowadays, neuroscientists also investigate the key dimension of integrity and examine the neural correlations in the human brain. Tabibnia and Lieberman (2007) suggested that human behaviour is not only driven by material factors but also by fair offers and integrity, which in turn stimulate the reward region of the brain. Furthermore, they confirmed that fairness can be directly activated by rewards or indirectly through punishment. Punishing an unfair behaviour may result in the perception of justice and in the willingness to be more cooperative in the long term. Interestingly, Tabibnia and Lieberman (2007) confirmed that fairness and cooperation activate the same hedonic regions in the human brain. Yet, Crockett et al. (2013) stated that too little is known about the human brain to prove the extent to which neurobiological determinants of punishment can be used to make decisions in this regard. However, from a behavioural, pharmacological, and neuroimaging perspective, they confirmed that punishment of an unfair partner is linked to the perception of fairness. In his leadership study, Rock (2009) shed some light on the expectation of punishment for an unfair partner. He believed that justice and meeting expectations of punishing an unfair partner in a personal relationship would have an impact on the reward region in the human brain and consequently affect fairness. This idea will be discussed in greater depth in Chapter 4, which will explore the impact that these concepts discussed in Chapter 3 have on the customer's brain.

3.4   Benefits of a Long-term Salesperson-Customer Relationship

By discussing the antecedents (Section 3.3.3) and the consequences (Section 3.3.2) of relationship quality in salesperson-customer dyads (Section 3.3.1), the basic structure of a success chain (Section 3.3, Figure 9) with the salesperson's cognitive performance as input and the customer behavioural patterns as output was described. In Sections 2.2.2 and 2.2.4, arguments were provided as to why the dual-process framework (automatic and controlled social cognition systems) should be incorporated into the success chain which facilitates the understanding of a long-term salesperson-customer relationship. Additionally, Ganesan (1994) already pointed out that the long-term nature of a salesperson-customer relationship

is a function of mutuality and the extent to which the parties trust each other. The construct of trust itself also has an affective, a cognitive and a conative component which need to be considered in the process of building and maintaining a long-term salesperson-customer relationship (Falcone & Castelfranchi, 2001; McAllister, 1995). Hence, trust and trustworthy behaviour have a significant influence on the development stages of a long-term salesperson-customer relationship (Swan et al., 1999). The main dimensions of trustworthy behaviour are ability, benevolence and integrity (Borum, 2010; Lewicki & Tomlinson, 2003). Therefore, the trust-building process with its dimensions of ability, benevolence and integrity reflects the development of a long-term salesperson customer relationship, and the construct of trust can be used to explain its development stages.

Furthermore, mutual dependence refers to the need of a company or a salesperson to maintain an exchange relationship with another company or a customer to achieve their business objectives (Razzaque & Tan Gay Boon, 2003). Dependence in combination with the salesperson's personal selling behaviour can be seen as a key construct of relationship behaviours (Guenzi & Georges, 2010; Morgan & Hunt, 1994). In particular, personal selling in markets with complex and customised products and services, such as industrial machinery, computer, electronic and optical products, transport equipment and knowledge-intensive services (Madhavaram & Appan, 2010) is deemed to be critical nowadays, mainly because of the product and service complexity (Bettencourt et al., 2015; Ingram et al., 2008; Palmatier, 2008). Therefore, a salesperson's personal selling style is important to successfully establish and develop a long-term salesperson-customer relationship.

As mentioned repeatedly in earlier sections of Chapter 3, relationship marketing activities must bring specific benefits for both the seller and the buyer side. Relationship marketing activities are mainly initiated by the seller party to achieve specific goals. Thus, it is often the salesperson who initiates the relationship marketing process (Section 3.3) and approaches potential customers. This unidirectional perspective seems most relevant as the salesperson is the driver for business (Hennig-Thurau et al., 2002), even if effective relationship marketing ultimately creates benefits for both parties (Palmatier, 2008). The benefits of a long-term salesperson-customer relationship can be different. In general, the main objective of establishing and developing salesperson-customer relationships is to generate economic benefits for the seller and value for the buyer company (Bettencourt et al., 2015; Ingram et al., 2008; Palmatier, 2008). For the seller company, such benefits normally take the form of higher revenue, more profit and reduced transaction costs (Dowling, 2002; Winkelmann, 2008). For the buyer company, these benefits manifest themselves as material and social benefits (Galvagno & Dalli, 2014).

However, these benefits may not always be measurable; they can also be in the form of social benefits resulting from an interpersonal relationship between a salesperson and a customer. Goodwin and Gremler (1996) already suggested that interpersonal relationships are essential because some of them have a long-term character and they provide social and trusting benefits such as consumer loyalty in services. However, it can be argued that the customer is not particularly interested in the interpersonal relationship itself, but rather only in the benefits and achieving his instrumental objectives through the relationship. An

interpersonal relationship is needed to achieve mutual benefits, and sellers as well as buyers must work on the basis of a *quid pro quo* transaction (Bettencourt et al., 2015). This means that long-term relationships should offer a guaranteed benefit for both parties, i.e., relationship marketing has to guarantee a Return on Investment (ROI) on the seller's side and an added value on the buyer's side (Palmatier, 2008).

Section 3.4.1 will discuss the development process of a salesperson-customer relationship on the basis of trust, which is developed as a rational choice over time and with positive interactions between the salesperson and the customer. Section 3.4.2 will argue that the salesperson's personal selling approach is crucial during the establishment and development of a long-term salesperson-customer relationship to create benefits for the seller and added value for the buyer party. Section 3.4.2.1 will elaborate on the role of the salesperson and his personal selling style before Section 3.4.2.2 highlights the significance of the salesperson in the solution selling of high-technology products and services.

3.4.1 Development Process of a Long-term Salesperson-Customer Relationship

The customer's decision-making process in salesperson-customer dyads was discussed in Section 2.2.6. Special attention was given to the customer's decision-making process under uncertain conditions. Uncertain conditions in the sale of complex and customised products and services arise from the market uncertainty, technological uncertainty, competitive volatility, network externalities and the importance of industry standards, unit-one costs, tradability problems and knowledge spillovers (Mohr et al., 2010; Sharma et al., 2008). Interesting to note was that in many instances, the customer often uses the cost-benefit-analysis when making decisions under uncertain situations. In contrast, if these uncertainties are reduced by the salesperson, the customer uses a logical analysis when making his decision (Lamar, 2006).

It also emerged that decision-making under conditions of uncertainty is often not traceable and individual in its outcome (Huettel et al., 2005; Lamar, 2006). This is because decisions made under such conditions are often unconscious ones without the awareness of the mind (Zurawicki, 2010). Therefore, people revert back to personal experience in situations of uncertainty, instead of going through a rational decision-making process (Taghavifard et al., 2009). These personal experiences in situations of uncertainty are often affective and therefore emotional in nature (Baumeister, Vohs, DeWall, & Zhang, 2007). In such uncertain situations, personal experiences are part of interpersonal relationships and therefore dependent on the level of trust between the exchanging partners (Petermann, 2013) (Section 3.3.1.1).

Lewicki and Tomlinson (2003) noted that the trust-building process has different development stages in which an individual such as a salesperson or a customer can influence this process with their personal behaviour. They further suggested that the trust-building process is based on relationship commitment and effort by both interacting parties until a

state of satisfaction is achieved. Thus, the trust-building process shapes the quality of the relationship. This means that uncertainty needs to be reduced and risk needs to be minimised in situations where trust has not yet developed because in the absence of uncertainty and risk, there is no need for trust and trustworthy behaviour (Cowles, 1997; Moorman, Zaltman, & Deshpande, 1992) (Section 3.3.1.1). However, during the first phase of salesperson-customer contact, there is normally an air of uncertainty and risk because the concept of trust has yet to be developed and the behavioural intentions of the interacting parties are not yet clear (Ingram et al., 2008). During this risk phase and throughout the different levels of trust (Section 3.3.1.1), interpersonal reward situations can help to positively develop the trust-building process (Meckl-Sloan, 2015).

Researchers such as Rosenberg (1980) attempted to capture the trust-building process from a rational perspective, which is cognitive in nature. However, trust always has cognitive, affective or conative dimensions (Bruhn, 2013) (Section 3.3.1.1). Since the cognitive dimension is primarily related to the rational forms of trust (Castaldo, 2003), trust-building processes are viewed primarily from a cognitive perspective (Doney, Cannon, & Mullen, 1998). The definition of trust by Rousseau et al. (1998) is based on the psychological state. While trust is a psychological state, the trust-building process is a process which is achieved, moulded and formed by its condition (Rousseau et al., 1998). In Figure 13, the trust-building process is viewed as a rational development with a classic S-curve (Weber et al., 2005), while interpersonal trust (Borum, 2010) constantly grows with positive interactions over time (Holmes, 1991; Rempel et al., 1985; Weber et al., 2005).

Figure 13: Trust Development as a Rational Choice
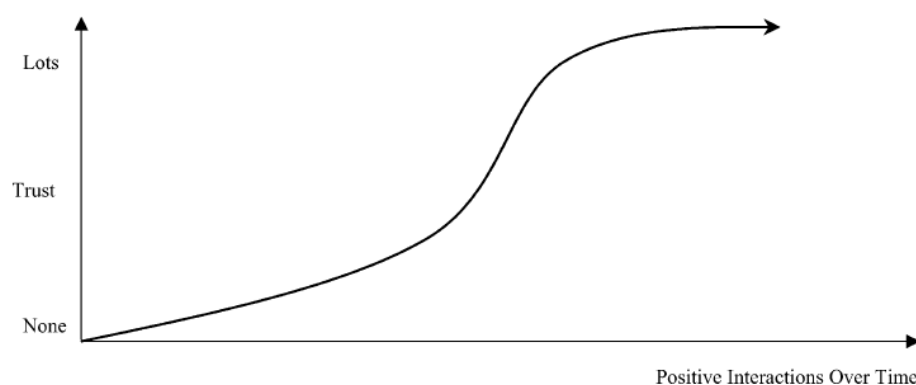
Source: Weber et al. (2005, p. 79)

As mentioned in Section 2.2.4, interpersonal reward situations are not only beneficial for an interpersonal relationship but also for a long-term salesperson-customer relationship, and they provide social benefits and added value such as loyalty, which someone gains when he trusts his counterpart (Goodwin & Gremler, 1996; Poore et al., 2012). Therefore, all personal relationships require positive interactions (Weber et al., 2005) or the production of interpersonal reward situations over time. Consequently, positive interactions and the production of interpersonal reward situations are also of the utmost importance in the interpersonal relationship between a salesperson and his customer.

As already mentioned, the trust-building process passes through distinct development stages in an interpersonal relationship (Lewicki & Bunker, 1996). However, the starting point and the initial phase of the trust-building process are particularly interesting. The former usually begins with a risk analysis by all the involved parties (Petermann, 2013). In addition to these risk analyses, the start of the trust-building process also includes the concept of reciprocity or generosity (Section 2.2.3) to signalise trustworthy intentions. However, it is very difficult to estimate the risk of a salesperson-customer relationship in its initial stages. On the one hand, the salesperson tries to work hard to maximise the selling price of the product or service, while the customer aims to achieve the lowest price for the best product or service on the other (Erevelles & Fukawa, 2013). This means that an interpersonal relationship most likely begins when one of the parties is not focused on the monetary benefits but rather on producing added value, and when this party is willing to take a risk and accept this risk (Weber et al., 2005). If this step is completed and the risk is estimated, the interactions between the two parties pick up momentum. As the rate of positive interactions increases, the rational factors are pushed further into the background, while the relationship factors and behaviours come to the fore (Rousseau et al., 1998).

Doney et al. (1998) shaped five trust-building processes to demonstrate their proposed underlying behavioural, cognitive assumptions: (1) the calculative process (Dasgupta, 1988; Williamson, 1985), in which individuals are opportunistic and try to maximise their self-interests, (2) the predictive process (Deutsch, 1960; Lewicki & Bunker, 1995), where individual behaviour is consistent and predictable, (3) the intentional process (Rempel et al., 1985), in which behaviour towards other people is aligned, (4) the capability process (Barber, 1983; Butler & Cantrell, 1984), in which the characteristics of competence, ability and know-how in individuals differ, and (5) the transferred process (Granovetter, 1985; Strub & Briest, 1976), where individuals and institutions can be trusted due to a reliable and stable network. Since trust may have a cognitive, an affective or a conative dimension (Bruhn, 2013), the affective dimension has an important role in personal selling and sales. Negative emotions are rather obstructive, whereas positive emotions are beneficial for enhancing trust and therefore future purchase intentions (Erevelles & Fukawa, 2013).

3.4.2 Personal Selling in the Development of a Long-term Salesperson-Customer Relationship and Co-Creation

The personal selling approach is afforded considerable importance within a long-term salesperson-customer relationship, because the customer's buying behaviour can be influenced to a large degree by the salesperson's consulting and advocacy services in B2B sales with complex and customised products and services (Pelham, 2009). Personal selling, also referred to as relational selling, is usually a face-to-face type of sales in which the salesperson functions as a problem solver, a partner and a coordinator, and where the sales process is aligned with a long-term proposition (Winkelmann, 2008). In addition to that, a salesperson must behave in such a way to develop customer trust, relationship commitment and customer satisfaction (relationship quality), and persuade a customer to make a purchase (Avila, Inks, & Avila, 2006). The key objectives of personal selling are, on the one

hand, to generate revenue for the seller company and, on the other hand, to develop a long-term relationship with the customer from the buyer company (Palmatier, 2008; Weitz & Bradford, 1999).

In sales research, recent literature such as Alamäki and Kaski (2015) suggests that revenue generation and long-term relationship building can be achieved with value-oriented interaction between the salesperson and his customer. Customer value can only be achieved if the salesperson has in-depth knowledge of the customer's technologies and processes (Blocker, Cannon, Panagopoulos, & Sager, 2012). In addition to that, the salesperson needs to know which stages the sales process go through, and he must be aware of what relevance his behaviour could have for society, the seller company and for the customer (Ingram et al. (2008). Thus, sales personnel act as an impulse for economic processes by spreading innovation, generating revenue, research and market feedback, and enhancing customer knowledge with information to ultimately solve problems. By implementing these objectives, the sales process is further defined.

Avila et al. (2006) proposed a sales cycle based on communication, trust and expertise which includes the following series of elements: prospecting, pre-approach, approach, gathering information, analysis and case preparation, presenting, gaining agreement, delivering the contract and building customers. Ingram et al. (2008) presented a sales cycle incorporating three major phases. These consisted firstly of understanding customer value, secondly, creating and communicating customer value and thirdly, delivering and increasing customer value. Through the entire sales process and in an attempt to create customer value, it is important that the interacting parties have the same status as the other and not that the salesperson has a more dominant role than the customer (Alamäki & Kaski, 2015). This results in new knowledge and understanding of the business value of the products and services (Dixon & Tanner Jr, 2012).

The majority of practitioners do not have sufficient knowledge of these sales cycles. In fact, it is unclear what types of cognitive thinking arise through these sales processes and how the former are related to the customer's emotional brain (Alamäki & Kaski, 2015). Value creation in the context of sales is about understanding the customer and how the salesperson's brain interacts with the customer's brain. Thus, value creation is a socio-cognitive process in which new value is produced as a result of communication (Haas, Snehota, & Corsaro, 2012; Lieberman, 2007). Hence, the current study attempts to add knowledge to the existing literature by applying social cognitive neuroscience (Chapter 2) to the characteristics of a long-term salesperson-customer relationship (Chapter 3). In particular, it focuses on the conceptualisation of the linkage of the social domains of experience and interpersonal reward situations (Chapter 4).

3.4.2.1 Role of the Salesperson and the Salesperson's Personal Selling Style

Researchers such as Grönroos (2008) have raised the question as to who actually creates value in a salesperson-customer relationship. In doing so, Grönroos (2008) suggested that

both sides (seller and buyer) create a basis for the value creation process; the seller as value facilitator and the buyer as creator (*value facilitation model*). He stated that the term "*customer co-creation of value*" is well-known and frequently used in the management and marketing literature. Thus, on the one hand, both parties are responsible for the co-creation process and, on the other hand, the customer can be seen as a co-creator of value (Zhang & Chen, 2008).

In a collaborative setup between a salesperson and his customer, the salesperson functions as a partner, a coordinator and a problem solver, and the sales process is aligned with a long-term proposition (Winkelmann, 2008). It is argued that customer value can only be achieved if the salesperson has in-depth knowledge of the customer's technologies and processes (Blocker et al., 2012). Therefore, the role of the salesperson is to understand the customer and to become familiar with as many of his aspects as possible. The salesperson also needs to know the product and service he is selling, and to have the skills, non-opportunistic motivation and value identity (Castaldo, 2007) (Section 3.3.2.1) to create customer value.

On the basis of buyer interviews, Bettencourt et al. (2015) suggested a pragmatic sales cycle, which is in line with those created by Avila et al. (2006) and Ingram et al. (2008) (Section 3.4.2). This sales cycle provides a platform to discuss the role of the salesperson, which he occupies throughout the whole cycle. The salesperson must play an adaptive role throughout the course of the sales cycle (Bettencourt et al., 2015). Table 4 presents the adaptive role of the salesperson during the sales cycle in relation to the expressive relationship meaning and the commercial buyer meaning.

During the initial phase, the goal is that the seller and buyer parties get to know each other better. It is mainly about prospecting and about understanding customer value, as well as about commercial prospecting and understanding customer value. The second phase focuses on building a stronger and closer relationship with the customer. During this phase, it is important to gather customer information and create customer value. When the relationship is established in the third phase, this is the time to present the project, to gain agreement and to communicate customer value. The fourth phase makes a substantive attempt to respond to specific customer needs. In doing so, the contract is delivered, the relationship with the customer is further consolidated and customer value is delivered and increased. In the final phase, the relationship is ended if no further benefit and value can be generated. The role of the salesperson is then to close the business relationship and connection with the buyer firm. In all of these phases, the salesperson must demonstrate a personal selling style that encourages the customer to buy.

The personal selling style of the salesperson is important to create customer value during the various salesperson-customer interactions. These interactions are very dynamic in nature during the entire sales process and do not follow a specific agenda (Alamäki & Kaski, 2015; Haas et al., 2012). The salesperson is required to fulfil different roles during the sales cycle (Table 4).

Table 4: Adaptive Role of the Salesperson during the Sales Cycle

Relationship stage	Expressive relationship meaning	Commercial buyer meaning	Adaptive role of the salesperson
Getting to know each other	- Creating a close attachment - Seeing another person for who they really are	- Understanding business processes, technologies, and objectives	- Prospecting, pre-approach and approach - Understanding customer value
Building a stronger, closer relationship	- Spending quality time together - Getting validation of personal worth	- Adding more services - Overcoming business issues - Engaging in joint work projects	- Gathering information - Creating customer value
In a mature relationship	- Intertwining identities and roles - Interdependent emotions, thoughts and behaviours	- Exceeding performance criteria - Having joint processes that work efficiently and effectively	- Case preparation, presenting, gaining agreement - Communicating customer value
Responding to needs	- Comforting one another - Meeting personal needs - Being a source of social support	- Customising processes and products to meet work objectives - Addressing service failures appropriately	- Delivering the contract and building customers - Delivering and increasing customer value
Severing a close relationship	- Loss of social support - Personal guilt - Fear, anxiety and depression	- Operational downtime - Taking time to replace/bearing the costs of replacing a salesperson previously involved in a long-term relationship - Political risk in the company	- Closing the business relationship and the business connection

Source: adapted from Avila et al. (2006), Ingram et al. (2008) and Bettencourt et al. (2015)

In addition, he must be able to initiate any promised major activities during his interactions with the customer until customer value is obtained. He must be able to turn the customer into an active participant and thereby develop value propositions (Bettencourt et al., 2015). This means that the salesperson needs to influence the co-creation process in such a way that learning and increasing capabilities arise from it. This in turn requires him to have a dynamic and active attitude towards the customer and a personal selling style which focuses on customer value in all phases of the sales cycle. There are many different selling styles and practical guidelines. An accepted view of personal selling styles is that there are four basic prototypes which include the unconscious assessment of the limbic system: the *correct*, the *enthusiastic*, the *hard-seller*, and the *empathic* salesperson (Häusel, 2015). This personal selling style is in line with the definition of the salesperson's cognitive performance (Section 2.2.5).

The *correct salesperson* tries to provide security and stability. Furthermore, he is reliable, asks the customer about his needs, listens carefully and tries to develop long-term relationships (Häusel, 2015). Within a salesperson-customer relationship, he uses a *collaborative* approach to selling (Palmatier, 2008).

The *enthusiastic salesperson* is sociable, becomes quickly excited about a new project, new technology or tries to solve a problem in an unconventional manner. He is an expert, talks about features and benefits, tries to solve problems and is objective with regard to the matter itself (Häusel, 2015). Within a salesperson-customer relationship, he has a *knowledgeable* selling style (Dixon & Tanner Jr, 2012).

The *hard-seller salesperson* has power, is looking for success and always presents his social status. He makes aggressive offers and tries to close a sales deal as quickly as possible (Häusel, 2015). Within a salesperson-customer relationship, he has a *goal-oriented* selling style (Squire et al. (2009)).

The *empathic salesperson* is protective and understanding. He is sensitive towards his customers and he tries to look for signs of rejection and failure in advance (Häusel, 2015). Within a salesperson-customer relationship, he has a *sensitive* selling style (Ingram et al., 2008).

Each salesperson's selling style is characterised by a particular behaviour. Häusel (2015) argues that each salesperson has a predominant selling style, but successful salespeople can combine various selling styles depending on the sales situation. In Section 6.2.2, the personal selling styles of the salespeople participating in this study are categorised as follows: (1) collaborative, (2) knowledgeable, (3) goal-oriented or (4) sensitive, which is in line with Häusel's (2015) approach. This is important because these selling styles show how a salesperson can apply his cognitive performance. The salesperson's cognitive performance, which can be defined as the behaviour resulting from demonstrating competence, consistency and predictability, caring, empathy, mentalising, goodwill, honesty, fairness, dedication and commitment to a goal (Section 2.2.5), is important to activate the human reward system and to produce interpersonal reward situations in the customer's brain.

3.4.2.2 Significance of the Salesperson in Solution Selling of High-Technology Products and Services

In the context of complex and customised products and services, researchers and practitioners have investigated different sources of uncertainty, such as market uncertainty, technological uncertainty, competitive volatility (Mohr et al., 2010; Sharma et al., 2008) (Sections 2.2.6 and Section 3.4.1). It is precisely these uncertainties which make it difficult for a salesperson to sell in this environment (Ingram et al., 2008). Complex and customised products and services are frequently referred to as high-technology products (Hobday, 1998; Zakrzewska-Bielawska, 2010). The discussion and the definition of complex and customised products and services, also frequently referred to as high-technology products and services, are important because the companies participating in this study are categorised accordingly in Section 6.2.1.

Before identifying the characteristics of the high-technology sector, the terms *'technology'* and *'high-technology'* need to be defined in relation to the industrial environment and the advanced technological development of tools and machines.

"Technology is the relevant knowledge, skills, and abilities to develop new products and services and can encompass product technology (innovation in the products) or process technology (innovation in the process or manufacturing)." (Sharma et al., 2008, p. 290)

This definition of the term *'technology'* includes the distinction between product technology and process technology, and the associated factors of appropriate knowledge, skills, and abilities to develop, manufacture and sell new products. This distinction and the associated factors are strongly related to individual professional groups in the high-technology environment.

"High-technology generally refers to cutting-edge or advanced technology – which means that the definition shifts over time. What was "high-tech" in the 1960s – for example, a colour TV – would be considered primitive technology by today's standards." (Mohr et al., 2010, p. 9)

It is clear from these two quotes that the high-technology sector is difficult to define. The definition shifts over time because seller companies are constantly trying to improve their knowledge, skills and abilities in their individual occupations. Therefore, products called high-technology today may be obsolete tomorrow and replaced with a newer and more advanced product. However, in the context of this study, it makes sense that the high-technology environment is defined according to today's standards to ensure that all the empirical data collected during the interviews and observations can be seen as reliable and valid. Furthermore, there are two important reasons why the domain of the high-technology sector should be understood and defined: (1) economic output und purchases are driven by innovative high-technology industries, and (2) marketing strategies in high-technology environments must have a basis for their starting point (Mohr et al., 2010). For a holistic view of the definition of high-technology, technologically advanced products and the company's internal processes on how the products have been created, both need to be incorporated into the perspective (Hecker, 2005). The different definitions of high-technology can be divided into input-based (number of technical employees, amount of research and development (R&D) costs, number of patents) and output-based approaches (products comprising new and top level technology) (Kask & Sieber, 2002; Mohr et al., 2010).

The U.S. Bureau of Labor Statistics (BLS) and similar organisations are frequently used for the input-based definition of high-technology. The BLS defines high-technology by classifying industries based on certain factors such as the proportion of scientists, engineers and technicians. The BLS characterises firms with a high proportion of these occupational groups as high-technology industries (Mohr et al., 2010). The Organisation for Economic Cooperation and Development (OECD) identifies high-technology industries largely based on the ratio of R&D expenditure to the value added (Hatzichronoglou, 1997). This R&D expenditure is about 8 to 15% of the sales value of a company in the high-technology sector (Zakrzewska-Bielawska, 2010). In addition to this definition, the Congressional Office of Technology Assessment characterises high-technology companies by focusing on innovative

manufacturing processes and by supporting the design, development and introduction of new products based on the systematic use of scientific and technical knowledge (Hecker, 2005).

Subjective characteristics are decisive for output-based definitions, which occur in the form of lists with well-established concepts of high-technology (Kask & Sieber, 2002). Taking this into consideration, a high-technology company is defined in the following manner:

> *"A high-technology company is defined as a business enterprise operating on the border of economy and science, in the sector regarded as high-technology and/or making products classified as high-technology items. The company runs research and development activity and combines the features of an innovative and knowledge-based company. It uses to a large extent modern information technology and is open to cooperation with the environment, creating various network connections and clusters with other organisations." (Zakrzewska-Bielawska, 2010, p. 97)*

This definition of a high-technology company shows on the one hand that business industries and products are classified as high-technology and on the other that R&D activities take place. Thus, industries, occupations and products and services must be included for a classification of high-technology companies (Hecker, 2005). As this study has collected empirical data from participants working in companies in Central Europe (Eastern Switzerland, Liechtenstein, western Austria and southern Germany), the classification of the U.S. Bureau of Labor Statistics (BLS) is not incorporated, but instead the classification of Eurostat (European Union (EU) management unit for creating European official statistics) based in Luxembourg. The Eurostat defines high-technology sectors as following:

> *"High-technology sectors include high-technology manufacturing industries and knowledge-intensive services, which are defined according to technological intensity and based on the activity classification NACE (English: Statistical classification of economic activities in the European Community; French: Nomenclature statistique des activités économiques dans la Communauté européenne)." Source: Eurostat, dated 03.05.2016*

Eurostat states that *"in order to compile statistics on high-technology economic activities, it uses an aggregation of the manufacturing industry according to technological intensity and based on NACE Rev. 2 level for compiling aggregates related to high-technology, medium high-technology, medium low-technology and low-technology"*. An excerpt from high-technology and medium high-technology industries is provided in Appendix G.

Eurostat has identified four high-technology and seven medium-high technology manufacturing industries which develop, produce and sell products with new and leading-edge technologies. Furthermore, Eurostat defines a similar approach for manufacturing various services, and divides them into knowledge-intensive services (KIS), knowledge-intensive market services (excluding high-tech and financial services), high-tech knowledge-intensive services, knowledge-intensive financial services, other knowledge-intensive services, less knowledge-intensive services (LKIS), less knowledge-intensive market services and other

less knowledge-intensive services. An excerpt from high-technology knowledge-intensive services is provided in Appendix H.

Eurostat identified six high-technology knowledge-intensive services. The definitions of high-technology, medium high-technology and high-technology knowledge-intensive services follow all the Eurostat definitions according to the NACE Rev. 2 Codes (Appendices G and H) (Goos, Hathaway, Konings, & Vandeweyer, 2013) and are used to classify the companies of the salespeople interviewed for this study (Section 6.2.1).

3.5   Conclusion

This chapter discussed the trend in marketing, which has shifted from transaction to relationship marketing in the past few decades. Researchers ultimately believe that an organisation should be relocated somewhere on the marketing strategy continuum, depending on the markets in which the specific customers are to be addressed. It became evident that individual customers and their interactions with the salesperson specifically are increasingly crucial for long-term salesperson-customer relationships to ensure that value for the buyer and seller parties can be generated.

The different origins of relationship marketing were discussed and the relatively large research field of relationship marketing was delimitated to discuss salesperson-customer interactions and thereby to elicit neuroscientific gaps until the focus could be placed on the single interaction between a salesperson and customer. The relationship quality and the antecedents and the resulting consequences are important to qualify a salesperson-customer relationship. This review of the literature has highlighted that cooperative behaviour leads to purchases and relational loyalty to repurchases, while positive WOM leads to the acquisition of new customers. Satisfaction is an inherent and unstable mental construct which lays the foundation so that a salesperson can produce interpersonal reward situations in the customer's brain.

Subsequently, the second part of this chapter focused on the antecedents of personal selling because they contain the cognitive potential of a salesperson to produce interpersonal reward situations during salesperson-customer interactions. Three primary concepts have regularly appeared in the literature, namely the concepts of (1) *demonstrating the salesperson's competence*, (2) *protecting the customer's interests* and (3) *maintaining the integrity within the relationship*. The salesperson's competence can indeed be justified in the perception of ability, predictability and consistency. Protection of the customer's interests can be seen from the perception of benevolence, which is divided into care, empathy and goodwill. Finally, integrity within the relationship can be divided into the perception of honesty, fairness, dedication and commitment.

The starting point to show how the automatic and the controlled social cognition systems underlying the human reward system and the potentially resulting interpersonal reward

situations can contribute to researchers' understanding of the development of a long-term salesperson-customer relationship stems from the fact that the customer's behavioural intentions correspond to a mental state which consist of cognitive, affective and conative components. Secondly, a salesperson strongly influences the customer's conscious and unconscious social cognition systems, which affects the decision-making process. Therefore, if a salesperson is able to convey the perception of ability, benevolence and integrity in his interactions with the customer, then interpersonal reward situations in the customer's brain may be produced and lead to satisfaction in specific sales relevant situations (Section 2.2.3).

4 SYNTHESIS OF THE LITERATURE AND CONCEPTUALISATION OF THE BLACK BOX

4.1 Introduction

Chapter 4 will present a synthesis of the literature review and a conceptualisation of the black box of the customer's mind. Therefore, Chapter 4 is divided into two sections. In the first part (Section 4.2), pertinent literature from the previous two literature review chapters will be summarised and the relevant contributions to the development of the social domains of experience will be tabulated. The literature will be systematically reviewed and drawn from B2C, B2B and from the high-technology environment. In addition to that, social cognitive neuroscience literature will be reviewed and used supportively to better understand the customer's unconscious mind. Each of these research fields has contributed to the definition of the social domains of experiences which are newly introduced and explored within the scope of this study. In the following sections, the social domains of experiences will be discussed in-depth. In the second part of this chapter (Section 4.3), these social domains of experience will be incorporated into the conceptual framework. On the basis of this, empirical data was collected from companies in the high-technology B2B sector in Central Europe with their complex and customised products and services in their product portfolio.

4.2 Synthesis of the Literature Review

Chapter 2 reviewed the relevant literature in the field of social cognitive neuroscience and its application to buyer-seller relationships and salesperson-customer dyads. Chapter 3 reviewed the scientific literature on the psychological antecedents (Section 3.3.3) and the behavioural consequences (Section 3.3.2) of a long-term salesperson-customer relationship, which are based to a large extent on the quality of the relationship between these two parties (Section 3.3.1).

The literature on salesperson-customer relationships explains that there are specific psychological antecedents which positively influence the quality of the relationship between a salesperson and his customer. This traditional literature on the salesperson-customer relationship and its well-established antecedents can explain the type of influences that these antecedents have on a salesperson-customer relationship and its outcomes, but they cannot explain how these concepts work to influence the customer's mind. More specifically, this means the traditional literature does not explore the types of cognitive thinking that arise when these processes are activated by the salesperson and how these may be related to the customer's emotional brain. With its focus on the functioning of the human brain and brain areas, social cognitive neuroscience may offer a way to unpack this. The application of neuroscientific findings to salesperson-customer relationships has the potential to explain how the emotional and logical brain areas of the human reward system may be addressed, which could potentially lead to a better understanding of the development of a salesperson-customer relationship and its outcomes (Hsu, 2016).

Furthermore, social cognitive neuroscience literature shows that researchers believe that about 90% of the information which reaches the human brain is processed without the conscious awareness of the human mind (Zurawicki, 2010). This means that all this information is processed unconsciously in the customer's brain and without the customer's awareness. In addition to that, social cognitive neuroscientific literature shows that there are psychological antecedents which are related to the automatic and controlled brain networks of the human reward system (Dimoka et al., 2007). Therefore, the goal of the synthesis in the first part of this chapter is to evaluate the social domains of experience which are investigated by the salesperson-customer relationship and at the same time by social cognitive neuroscience researchers. In addition to that, links will be drawn to neuromarketing, which has already incorporated some findings from social cognitive neuroscience.

The literature on the high-technology sector and its complex and customised products and services will highlight the important role that the salesperson plays within this context. It will also address the existing uncertainties and why consultative relationship behaviour (Section 3.3.2.2), also referred to as personal selling behaviour (solution selling) within this context, is needed to sell successfully. Finally, based on this literature, the social domains of experience will be defined (Section 2.2.3). Table 5 below summarises the relative contribution of the literature to define the five social domains of experience. The literature which was systematically reviewed comes from B2C, social cognitive neuroscience, B2B and from the high-technology environment.

Table 5: Relative Contribution of the Literature

Business-to-Consumer (B2C)	Social cognitive neuroscience	Business-to-Business (B2B)	High-technology environment
- Shows how neuro-marketing, also known as consumer neuroscience, integrates findings from social cognitive neuroscience - Explains how findings from neuro-imaging techniques could complement traditional empirical techniques and may help researchers to better understand consumer behaviour and the decision-making process - Provides examples such as product brands, product positioning, prices and consumer behaviour marketing where the applica-	- Provides insights into the human brain and its social cognition processes - Explains the dual process framework of the automatic (reflexive) and the controlled (reflective) social cognition systems - Combines the two social cognition systems and represents the human reward system - Clarifies how the unconscious part of the human reward system could potentially be addressed - Contributes to the definition of the salesperson's cognitive performance, which can be defined as the behaviour resulting from	- Explains the characteristics of a long-term salesperson-customer relationship - Discusses the relationship quality, which can be conceptualised through the components of trust, commitment and satisfaction - Highlights the importance of the relationship quality, which serves as a key indicator for assessing customer relationships - Emphasises the behavioural consequences of the relationship quality, such as purchase and repurchase intentions and positive WOM - Investigates the psy-	- Describes personal selling (solution selling) within the context of complex and customised products and services frequently referred to as the high-technology products and services - Investigates different sources of uncertainty, such as market uncertainty, technological uncertainty, competitive volatility, network externalities and the importance of industry standards, unit-one costs, tradability problems and knowledge spillovers - Highlights the difficulty of selling within this environment and addresses the fact that

| tion of neuroscience shows promise in terms of offering direct access to the consumers' mind | demonstrating competence, consistency and predictability, care, empathy, mentalising, goodwill, honesty, fairness, dedication and commitment to a goal | chological antecedents which influence the relationship quality and which serve as the basis for the social domains of experience defined within this study | these uncertainties and risks need to be overcome
- Requests social- and value-oriented com-mitment and inter-actions between the salesperson and his customer |

B2C literature contributes primarily by showing how findings from social cognitive neuroscience could be applied to market research, e.g. Agarwal and Dutta (2015), Varshney (2016), Daugherty and Hoffman (2017). In doing so, social cognitive neuroscience (Lieberman, 2007; Ochsner & Lieberman, 2001) potentially adds to researchers' understanding by integrating insights from the human brain and its social cognition processes into market research approaches. B2B explains the characteristics in relation to developing and maintaining a long-term salesperson-customer relationship, e.g. Grönroos (2004), Palmatier (2008), Sheth et al. (2012), whereas the high-technology environment mainly highlights the uncertainties and risks which are present within this setting (Mohr et al., 2010; Sharma et al., 2008). Consequently, the social domains of experience are needed to potentially eliminate these uncertainties and risks. Figure 14 below shows how the relevant literature has been synthesised.

Figure 14: Synthesis of the Relevant Literature
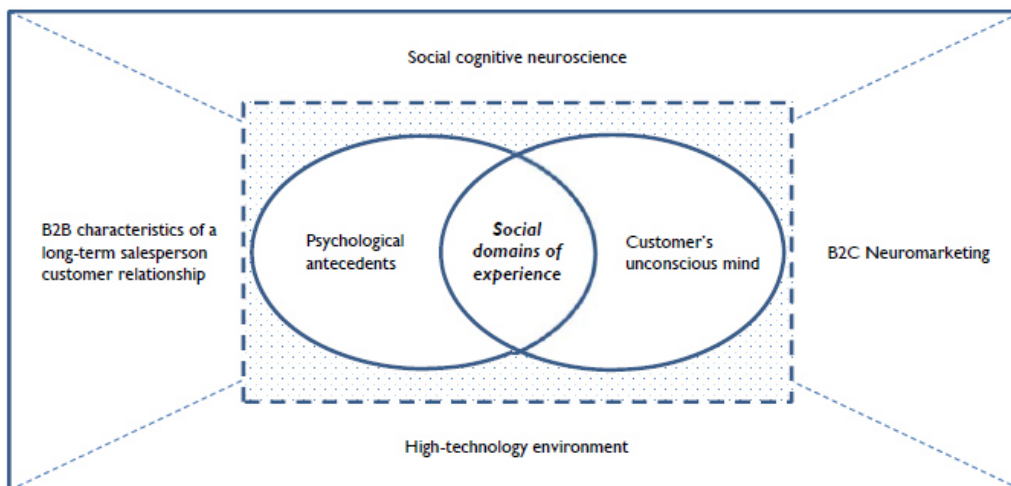
Source: B2B, Social cognitive neuroscience, B2C, High-technology environment

A list of value criteria was used to evaluate the relevant social domains of experience. This list was essential to further define these social domains. Table 6 below presents the value criteria for evaluating the socal domains of experience.

Within the salesperson-customer relationship context, potential doubts must be reduced and future prospects must be generated. In addition to that, it is important that a personal

relationship is established with the customer and attempts are made to perceive his mental situation.

Table 6: Value Criteria for Evaluating the Social Domains of Experience

	Addressing the unconscious part of the human reward system (automatic social cognition system)	Producing interpersonal reward situations and reducing interpersonal threat situations	Resulting social domains of experience to be investigated
Psychological antecedents of relationship quality, such as demonstrating competence, consistency, predictability, care, empathy, mentalising, goodwill, honesty, fairness, dedication and commitment to a goal	Reducing potential doubts and generating future prospects?		Certainty
	Establishing a personal relationship and how to perceive the discussion partner's mental situation?		Cooperation
	Ensuring just and honest treatment and meeting expectations?		Fairness
	Giving the discussion partner the freedom to decide and adjusting control behaviour?		Autonomy
Psychological antecedents which have the potential to address constructs with cognitive, affective and conative components	Explaining the business position and reducing potential impact?		Social status

Source: Author

The customer must be teated in a just and honest manner and his expectations must be fulfilled. Furthermore, the customer should have the freedom to decide and the the salesperson must adjust his control behaviour. Finally, the salesperson needs to explain his business position to the customer and its potential impact must be reduced. These are all important prerequisites which have to be taken into account when defining the social domains of experience.

The social domains of experience could be influenced by the salesperson's cognitive performance (Section 2.2.5) and they may address the unconscious part of the human reward system (Section 2.2.3). While potentially addressing the human reward system, interpersonal reward situations may be produced and interpersonal threat situations may be reduced (Section 2.2.4). Furthermore, the social domains of experience could address the components of relationship quality (Section 3.3.1) with cognitive, affective and conative dimensions (Sections 3.3.1, 3.3.2 and 3.3.3). It would have also been possible to define other constructs such as uncertainty, competition, unfairness, dependence and social insignificance as they also seem to be influenced by the salesperson's cognitive performance and to

potentially address the human reward system. However, there is also a likelihood that these constructs may have addressed the human reward system in a negative way and led to interpersonal threat situations.

By defining the social domains of experience, the *"what"* as well as the *"how"* could be addressed. The *"what"* may tell us what influences these concepts have on sales relationships and outcomes, and the *"how"* may explain the process in the human brain in general and in the human reward system in specific terms. In the following sections, the social domains of certainty (Section 4.2.1), cooperation (Section 4.2.2), fairness (Section 4.2.3), autonomy (Section 4.2.4) and social status (Section 4.2.5) will be introduced and defined. They show potential to activate the human reward system, which may lead to interpersonal reward situations in the customer's mind (Section 2.2.4). The stimulation could be initiated by the salesperson and his cognitive performance (Section 2.2.5). At the end of each subsection of this chapter, the fundamental prerequisites associated with the social domains of experience in the salesperson-customer context that are worthy of further empirical investigation will be emphasised. These prerequisites formed the basis for the interview guides (Appendices A and B).

4.2.1   Social Domain of Certainty

This section will define the *social domain of certainty* in the salesperson-customer context by synthesising the literature on social cognitive neuroscience and on salesperson-customer relationships with respect to how a salesperson unconsciously produces *certainty* within the customer's mind. Furthermore, it will show how the salesperson could potentially address this domain in cognitive terms so that the customer's human reward system is positively influenced.

The social domain of certainty can be defined as a s*ales situation where the customer has received sufficient relevant information from the salesperson*. This definition is based on the knowledge of the psychological antecedent of 'demonstrating the salesperson's competence' (Section 3.3.3.1), and on the fact that social cognitive neuroscientists are investigating uncertain situations during the decision-making process with their functional neuroimaging techniques (Section 2.2.6).

A salesperson who can answer the customer's technical questions in detail is deemed competent by the customer. The competence of a salesperson describes how he uses his skills and his expertise to answer existing questions (Palmatier, 2008). At the beginning of a project, many technical questions arise from the customer's side. The salesperson-customer relationship has not yet had time to develop and the customer is unsure whether the salesperson will be able to answer his questions. However, the customer expects that the technical salesperson can do so. This expectation that the salesperson is able to answer his questions results in perceived uncertainty in the customer's brain. Taghavifard et al. (2009) stated that uncertainty is the constant companion of business and life in general, and that most decisions are made under conditions of uncertainty. This means that there is a

potential threat situation produced in the customer's brain in such cases, consciously or unconsciously, because the customer's expectation is that the salesperson can answer his questions. The connection to neuroscience could be found in this expectation because it is connected with experiences from the past which are stored as patterns in the human brain and which will be used for future action and decisions again (Carter, 2009).

Neuroscientists have found out that our brain constantly tries to grasp the meaning of the world to control our future actions. Behavioural patterns or experiences help people to understand future actions and events, and allow them to react according to the situation (Carter, 2009). If a salesperson tries to fulfil the customer's expectations that he can answer all his questions, conscious and unconscious processes are activated in the brain of the customer. This means that the prefrontal cortex (Ernst & Paulus, 2005), which is responsible for the cognitive aspects (Sharot et al., 2004), and the limbic system (McClure, Laibson, et al., 2004), which is responsible for the emotional aspects, are included in these conscious and unconscious processes (Sharot et al., 2004). These processes are activated due to perceived uncertainty because it is not clear whether the salesperson can meet the expectations of the customer.

In situations of uncertainty, an analysis based on feelings or on past experiences is carried out; in situations of certainty, the analysis is logical because uncertainty is a feeling which is most common in situations with limited and unpredictable information about the predicted outcomes of behaviour (Huettel et al. (2005). Thus, a salesperson who is capable of fulfilling the customer's expectations may induce the customer's brain to make logical decisions. This means that the customer's brain may perceive them as positive reinforcers, which potentially creates a rewarding situation. This may happen because the salesperson is able to maximise positive and minimise negative feelings (Lieberman & Eisenberger, 2009). Thus, the unconscious part of the human reward system (limbic system) could be addressed by the salesperson's stimuli to maximise positive feelings, which creates an urge in the limbic system of the customer's brain and in turn a desire in the controlled part (pre-frontal cortex) of the brain. If this desire is fulfilled, a sense of satisfaction may arise which generates an interpersonal reward situation (Carter, 2009) (Section 2.2.3).

This explains why salespeople are encouraged to eliminate uncertainties and the associated threat situation as quickly as possible by acting transparently and disclosing all relevant information; customers expect honest advice from salespeople, which contributes to the buyer company's success (Ingram et al., 2008). Therefore, customers feel much safer when they are given information in an honest and authentic manner. Satisfaction and a related interpersonal reward situation (Carter, 2009) could be created by the general and specific behaviours of a salesperson.

Certainty makes decision-making much easier (Dimoka et al., 2007), so this should be the goal when negotiating a sale. Uncertainty corresponds to some extent to the loss of control. This leads to a feeling of uncertainty, which is transmitted via the limbic system to the prefrontal cortex (Hains & Arnsten, 2008). When a situation does not seem to be under control, the automatic and the controlled human social cognition systems interact, which

then activates the related brain structures, thereby resulting in a threat response which reduces the subject's ability to assess the situation objectively. This feeling of not being able to predict the future creates even more uncertainty. Consequently, the social domain of certainty refers to a situation with sufficient and predictable information on the anticipated outcomes of behaviour and the conviction of the individual that the available knowledge corresponds to the real situation (Lamarre & Shoham, 1994). These ideas will be empirically explored in the current study.

It is therefore of interest 'how salespeople reduce potential doubts which are mutually present in the first phase of customer contact' and 'how salespeople generate future prospects which correspond to the positive experiences of the customer'. The first idea focuses more on the salesperson himself and how he sees himself in the contact with the customer; the second idea concentrates more on the customer and what salespeople do to generate positive future prospects. By analysing the social domain of certainty, the goal is to improve researchers' and practitioners' awareness of how salespeople attempt to produce interpersonal reward situations in the customer's brain and what salespeople may do in specific customer contact situations.

4.2.2   Social Domain of Cooperation

This section will define the *social domain of cooperation* in the salesperson-customer context by synthesising the literature on social cognitive neuroscience and on salesperson-customer relationships with respect to how a salesperson unconsciously produces *cooperation* within the customer's mind. Furthermore, it will show how the salesperson could potentially address this domain in cognitive terms so that the customer's human reward system is positively influenced.

The social domain of cooperation can be defined as *the salesperson recognising the customer's personal interests and his mental situation*. This definition is based on the psychological antecedent of 'protecting the customer's interests', the literature on cooperative behaviour which says that cooperation not only needs the renunciation of self-interest but also includes tangible and intangible knowledge transfer between two parties (Section 3.3.2.1), and on the fact that social cognitive neuroscience investigates cooperative behaviour during the decision-making process and its related brain processes (Section 2.2.1).

A salesperson who cooperates with the customer ultimately brings success for the customer. He does so by offering and selling the customer a technical solution which brings him revenue and therefore recognition. Cooperative behaviour occurs when two or more parties work towards a mutually advantageous result (Borum, 2010). If they are both to work towards a common goal, the salesperson as well as the customer must know how this goal is defined. The challenge is then to achieve the goal. Thereby, each party sidelines their own preferences to achieve a common goal, which could often be influenced by each other's current mental situation. In order to create cooperative behaviour on the customer side, the salesperson must understand and be able to assess the latter's individual personal

preferences (Agarwal & Dutta, 2015). However, it is difficult to work these out and to address them adequately. Salesperson-customer research has shown that initial experiences must be positive if they are going to lead to the development of a collaborative relationship between the salesperson and the customer (Palmatier, 2008). This positive experience of cooperation assures a greater knowledge transfer (Squire et al., 2009). The connection to neuroscience could be found in these personal preferences because they are connected with experiences which are stored as patterns in the human brain and which will be used for future action and decisions during collaborative efforts (Carter, 2009).

Neuroscientists with their functional imaging tools have discovered that cooperative behaviour is related to personal preferences, and they hope to obtain even greater insights into the unconscious drivers of preference and choice in the future (Ćosić, 2016). Furthermore, neuroscientists distinguish between cooperation, which activates the orbitofrontal cortex, and competition, which activates the medial prefrontal and inferior parietal cortices (Decety et al., 2004). They discovered that the orbitofrontal cortex is only activated during cooperative tasks (Rilling et al., 2002), whereas the medial prefrontal and inferior parietal cortices are only active during competitive tasks (Decety et al., 2004). In addition, the caudate nucleus is activated with social cooperation and is related to a person's level of motivation (Dimoka et al., 2007). This means that the conscious (orbitofrontal cortex) as well as the unconscious (caudate nucleus) brain areas are active. Furthermore, the caudate nucleus is also activated if an unexpected reward is received during cooperative tasks (Dimoka et al., 2007). Thus, cooperation is associated with the reward process because the same brain areas in the nucleus accumbens, the caudate nucleus, the ventromedial frontal/orbitofrontal cortex, and the rostral anterior cingulate cortex are activated in the same way as in reward situations (Rilling et al., 2002). This means that cooperative behaviour addresses the reward region in the human brain.

Since cooperation activates a neural process in the brain which includes the brain networks of the human reward system (Rilling et al., 2002), a salesperson is therefore induced to work cooperatively with the customer. Cooperation means that the salesperson needs to behave in such a way to achieve mutually advantageous results. With the additional knowledge from the neuroscientific insights, we know that cooperative behaviour is related to personal preferences; this means that a salesperson must know the customer's personal preferences and try to understand his mental situation. By addressing the customer's personal preferences along the road towards a common goal, the customer's human reward system may be unconsciously addressed. The salesperson must therefore try to increase the reward response through cooperation (Frith & Singer, 2008). If the salesperson is cooperative, the reward response from the customer could be increased because the customer begins to identify with the salesperson (Decety et al., 2004). As a result, a type of relatedness is displayed (Rock, 2009). Relatedness between two given individuals results in a mutually trusting relationship since the concept of cooperation is strongly related to trust (Decety et al., 2004). Furthermore, as discussed in Section 2.2.5, the cognitive neuroscience literature suggests that the salesperson's cognitive performance leads to a willingness on the part of

the customer to cooperate due to its impact on the customer's rewards system. These ideas will be empirically explored in the current study.

The social domain of cooperation will investigate how salespeople recognise the customers' personal interests and mental situation in a specific sales situation. In addition, it will investigate how salespeople try to sacrifice their self-interest in favour of their customers. Thus, this social domain of experience essentially encompasses the interpersonal and mutual cooperation between salespeople and their customers. The focus of cooperation is building up a personal relationship. Hence, cooperation results in trustworthy behaviour (Decety et al., 2004), where the salesperson and customer try to achieve a common goal during cooperative tasks in which business-related and personal matters are discussed. If a salesperson recounts a personal experience which corresponds with the customer's experiences, this produces relatedness (Decety & Jackson, 2004) between them, where the resulting behaviour of both parties can be regarded as non-opportunistic in nature (Tabibnia & Lieberman, 2007). Non-opportunistic means that the salesperson and customer place their own interests aside so that a common goal can be achieved.

It is therefore of interest 'how salespeople establish and develop a personal relationship with the customer' and 'how salespeople perceive the customer's mental situation'. The first point focuses more on the behaviour of the salesperson in front of the customer, while the second point focuses more on the customer and shows how the salesperson behaves towards the customer. The social domain of cooperation investigates how salespeople attempt to produce interpersonal reward situations in the customer's brain and what they may do in specific customer contact situations.

4.2.3   Social Domain of Fairness

This section will define the *social domain of fairness* in the salesperson-customer context by synthesising the literature on social cognitive neuroscience and on salesperson-customer relationships with respect to how a salesperson unconsciously produces *fairness* within the customer's mind. Furthermore, it will show how the salesperson could potentially address this domain in cognitive terms so that the customer's human reward system is positively influenced.

The social domain of fairness can be defined as *the salesperson treating the customer in a just and honest manner during their sales interactions*. This definition is based on the knowledge of the psychological antecedent of 'maintaining integrity within the relationship' (Section 3.3.3.3), and on the fact that social cognitive neuroscientists investigate fair behaviour in relation to the salesperson's cognitive performance (Section 2.2.5).

The salesperson's integrity is of central importance during the development of a long-term salesperson-customer relationship because the customer must be able to rely on the information given by the salesperson. Integrity requires the salesperson to act honestly, fairly and to have the customer's best interests at heart (Schwepker Jr, 2003). The salesperson must know what integrity means for the customer and how the latter perceives this if the

salesperson is to behave with integrity. This perception is again individual and customer-specific. Borum (2010) divided integrity into the perception of honesty and openness (Peters et al., 1997), objectivity and fairness (Renn & Levine, 1991), which are also seen as precursors of trust between the salesperson and the customer (Standifer et al., 2010). The customer therefore expects the salesperson to be honest, open, objective and fair in his interactions with him. The connection to neuroscience could be found in the concept of fairness because it is connected with the customer's expectation that he will be treated fairly. These expectations are stored as patterns in the brain and will be used for future actions and decisions during fair collaborations (Carter, 2009).

Neuroscientists conduct in-depth investigations into the concept of fairness and examine its neural correlations in the human brain. They have discovered that the human behaviour is not only driven by material factors but also by fair offers, which in turn may positively address the reward region of the brain. Furthermore, fairness can be experienced either directly by means of fair behaviour from one's counterpart, or indirectly, when, for example, an unfair partner is punished, as punishment brings justice with it in this case (Tabibnia & Lieberman, 2007). This means that neuroscientists investigate fair and unfair behaviour and shed light on the brain regions which are active during these behaviours. A possible consequence of this is that the salesperson can adjust his behaviour to generate perceived fairness within the customer's mind. Fair behaviour activates the brain regions such as the ventromedial prefrontal- and medial prefrontal cortex (Decety et al., 2004). Furthermore, neuroimaging studies also show increased activity in the ventral and dorsal striatum, which is associated with fairness, in particular in the regions of the dorsolateral prefrontal cortex and the anterior prefrontal cortex (Crockett et al., 2013; Crockett et al., 2008). In addition to that, fair behaviour releases dopamine, which activates the social reward system (Crockett et al., 2008). This means that conscious (controlled) and unconscious (automatic) brain regions are active during fair behaviour, and dopamine seems to positively influence the reward system.

With the realisation that fairness potentially activates the human reward system (Crockett et al., 2008) via the limbic system (Carter, 2009), the salesperson may be able to understand what kind of brain processes are active during his fair interactions with the customer. The more the customer feels that he is being treated fairly, the more rewarding a situation may be and the more dopamine may be secreted (Carter, 2009). In a situation with perceived unfairness in combination with a lower concentration of serotonin, this results in a higher level of rejection (Crockett et al., 2008). Serotonin therefore seems to be responsible for the control of negative emotions, which play an important role in perceived unfairness (Winston, Strange, O'Doherty, & Dolan, 2002). This means that a salesperson should try and behave in a just and honest manner and meet the customer's expectations that he will be treated fairly. This seems to result in the activation of the customer reward system, which has the potential to produce interpersonal reward situations (Decety et al., 2004) in the customer's mind. This may result in a state of emotional awareness, openness to new ideas as well as an increase in the willingness to establish a connection with the salesperson. These ideas will be empirically explored in this study.

The social domain of fairness will investigate how the salespeople treat customers in a just and honest manner. It will also reveal how the salespeople counteract potential defensiveness on the part of the customer during the conversation. In other words, the social domain of fairness investigates how salespeople meet the customer's expectations and achieve customer satisfaction by treating him in a fair manner (Carter, 2009). It will also examine the extent to which the emotional connection with customers is thereby strengthened (Decety et al., 2004).

It is therefore interesting to see 'how salespeople ensure that the customer is treated in a just and honest manner' and 'how salespeople ensure that the customer's expectations are treated fairly' are met. The first point concentrates more on how the salespeople assess their own behaviour when they are in contact with their customers, while the second point focuses on the customer and how salespeople react to the customer's behaviour which they themselves have caused by their own behaviour. According to the neuroscientific literature above, two interesting points related to the social domain of fairness are associated with reward and threat situations in the customer's brain. Honesty and fulfilment of the customer's expectations that he is going to be treated fairly strengthen the emotional connection between the interacting parties, and a rewarding situation may result from this. The social domain of fairness investigates how salespeople attempt to produce interpersonal reward situations in the customer's brain and what they may do in specific customer contact situations.

4.2.4   Social Domain of Autonomy

This section will define the *social domain of autonomy* in the salesperson-customer context by synthesising the literature on social cognitive neuroscience and the literature on salesperson-customer relationships with respect to how a salesperson unconsciously produces *autonomy* within the customer's mind. Furthermore, it will show how the salesperson could potentially address this domain in cognitive terms so that the customer's human reward system is positively influenced.

The social domain of autonomy can be defined as *the salesperson allowing the customer the perception of control and of having choices*. This definition is associated with the knowledge of the psychological antecedent of 'demonstrating the salesperson's competence' (Section 3.3.3.1), and the fact that social cognitive neuroscientists are investigating the customer's decision-making process under conditions of limited information (Section 2.2.6).

A salesperson interacting and defining a product or service with his customer is seen as the technical expert in the customer's area of interest, otherwise he would not be able to fully advise him. He usually has more technical information available in the discussions than the customer. During these technical discussions, the salesperson must give the customer all the details he requires so that the customer can decide whether the project will be realised, or not. Hence, the customer must see the technical feasibility behind the project. This allows him to feel as though he has the freedom to make decisions. Taghavifard et al. (2009) noted

that decision-making is often connected with the freedom of choice. To do so, the customer must always have different technical options available. He is, therefore, dependent on the salesperson and his expertise, and expects to receive all the required technical information to be able to freely decide on his course of action. However, it may happen that decisions are sometimes made under social pressure or time constraints in which it is not possible to carefully consider one's options (Taghavifard et al., 2009). Hui, Molden, and Finkel (2013) explained that the more autonomous the relationship partners feel within the relationship, the more they are willing to rely on their partner, and the more open and effective they are when dealing with conflicts. In their study on close relationships, they demonstrated that autonomy needs are more strongly related to well-being. The connection to neuroscience could be found in this autonomy need and the related well-being because they are connected with the customer's expectations that he can decide independently. Such expectations are stored as patterns in the brain and will be used for future actions and decisions on the object (Carter, 2009).

Deci and Ryan (2000) explained the self-determination theory of motivation. This theory is not just about the actual freedom of choice that people have with regard to the way they act but also a perceived decision-making freedom. Neuroscientists discovered that the anterior insular cortex (Lee & Reeve, 2012) and the anterior cingulate cortex are the two brain regions which show increased activity during self-determination tasks (Walton, Devlin, & Rushworth, 2004). This means that the limbic system (automatic social cognition system) is activated during self-determination and autonomous decision-making. Furthermore, Ryan and Deci (2006) stated that autonomy is a basic human need which should be achieved by every individual person, and it helps people to satisfy their basic desires. Desire is described as a wanting or yearning for something that brings pleasure or satisfaction, thereby potentially activating the reward process via the limbic system (Section 2.2.3). These findings of the limbic system show the salesperson the consequences of giving the customer the freedom to decide, or the perceived freedom to decide. Just the fact that the perceived freedom to decide activates the limbic system is a fundamental finding. Consequently, it is very important that the customer feels autonomous in his relationship with the salesperson. The more the customer is able to decide what he wants to buy, the more his level of autonomy increases (Deci & Ryan, 2000). Furthermore, controlling behaviour has to be minimised because this allows the basic desires of a customer to be satisfied (Ryan & Deci, 2006). These ideas will be empirically explored in the current study.

The social domain of autonomy will investigate how the salesperson gives the customer the freedom or independence to decide and what he is going to do with the technical choices provided by the salesperson. It will also investigate how salespeople handle their control behaviour during the customer's decision-making process, since autonomy is described as the control and the free will of each individual (Ryan & Deci, 2006). The more autonomous the relationship partners feel within the relationship, the more willing they are to rely on their partner, and the more open and effective they are when dealing with conflicts (Hui et al., 2013).

It is therefore interesting to see 'how salespeople allow the customer the freedom to decide' and 'how salespeople use control behaviour so that the customer feels as though the decision is his alone'. The first point concentrates more on how salespeople assess their own behaviour when they are in contact with their customers, while the second point focuses more on the customer and how salespeople think the customer is going to react if the salespeople follow a certain behaviour. By investigating the social domain of autonomy, the goal is to gain awareness of how salespeople attempt to produce interpersonal reward situations in the customer's brain and what they may do in specific customer contact situations.

4.2.5 Social Domain of Social Status

This section will define the *social domain of social status* in the salesperson-customer context by synthesising the literature on social cognitive neuroscience and on salesperson-customer relationships with respect to how a salesperson unconsciously produces *social status* within the customer's mind. Furthermore, it will show how the salesperson could potentially address this domain in cognitive terms so that the customer's human reward system is positively influenced.

The social domain of social status can be defined as *the salesperson participating and interacting actively with the customer in sales conversations*. This definition is based on the psychological antecedent of 'protecting the customer's interests' (Section 3.3.2.1), and on the fact that social cognitive neuroscience investigates social status and its impacts on interacting human beings (Section 2.2.3).

A salesperson who interacts with his customer is part of a group of two, which represents the smallest group possible. From motivation and emotion theory, it is known that the social status shapes the dynamic of a social group, and it determines the social power which will be attributed to each of the group members (Hareli, Sharabi, Cossette, & Hess, 2011). Chiao et al. (2004) argued that it is a major challenge to recognise one's own status and the social status of others in everyday social life. Once a person's social status is identified, the result is a set of expectations about their own status and their counterpart's role; or more generally, the dominant hierarchy within a group is established (Ridgeway & Diekema, 1989). As a matter of fact, higher-ranking individuals are often acknowledged with more information or social respect, whereas lower-ranking people expect a certain level of care and protection from the aforementioned group (Fiske, 1992). In a salesperson-customer relationship, this means that the salesperson must be aware of and estimate the consequences of his own social status as well as that of his customer. He must also be aware of what kind of impacts social status can have on the relationship with his customer.

Status has been discussed quite often in buyer-seller relationships, such as in combination with a buyer's professional experience and knowledge (Spekman, 1979; Tushman & Scanlan, 1981). However, with the advent of neuroimaging techniques, social status is researched intensively in the form of what happens in the brain if a higher-ranking person is in a

discussion with a lower-ranking person. Neuroscientists discovered that the neurotransmitter serotonin, which belongs to the same group as dopamine, is associated with social status (Riedl & Javor, 2012). Furthermore, Muscatell et al. (2012) found out that the perception of social status activates the brain areas of the dorsomedial prefrontal, medial prefrontal and precuneus/posterior cingulate cortex. This means that with the perception of the social status, automatic as well as controlled brain areas are activated. Another study discovered that if people are manipulated under experimental conditions to feel a lower social status, they are then able to read the emotions of others more accurately, compared to when they are made to feel a higher social status (Kraus, Côté, & Keltner, 2010).

For a salesperson, this means that he is encouraged to determine the customer-status-relevant criteria such as occupation, wealth and the affiliation to social groups with a high social status from the first moment of customer contact (Oakes & Rossi, 2003). If a person meets someone for the very first time, both parties will try to assess their relative importance to the other person, and the roles within this connection need to be established first (Kraus & Keltner, 2009). Furthermore, the salesperson's ability to recognise status in relationships is a crucial component of successful social interactions with his customers (Chiao et al., 2004). In the activation of the automatic as well as controlled brain areas, there is evidence that a higher status possibly influence the reward regions, especially the striatum, which overlaps with the brain structures activated by the financial rewards (Izuma, Saito, & Sadato, 2008). In other words, our brain tries to evaluate different criteria of status dimensions. If the customer's social status is not respected, this could lead to social rejection; the customer feels social pain, which is similar to physical pain (Eisenberger, Lieberman, & Williams, 2003), and a threat situation may arise. These ideas will be empirically explored in the current study.

The social domain of social status will investigate how salespeople display the social position that they hold in their organisation to the customer and how they behave towards lower-ranking customers. It will also investigate how salespeople display respectful behaviour in their interactions with the customer. As seen above, it is not only a major challenge to recognise one's own social status and that of others in everyday social life (Chiao et al., 2004) but also in the various phases of the development of a long-term salesperson-customer relationship. Considerable care must be taken not to underestimate the social position of a customer because this would result in a feeling of social rejection and in social pain, which are comparable to physical pain (Eisenberger et al., 2003).

It is therefore interesting to see 'how salespeople explain their business position' and 'how salespeople reduce the potential impact of their business position on the customer's side'. The first point focuses on the salesperson himself and how he sees himself during the contact with his customers, while the second point concentrates on the customer and what salespeople do to reduce their potential impact. By investigating the social domain of social status, the goal is to become aware of how salespeople attempt to produce interpersonal reward situations in the customer's brain and what they may do in specific customer contact situations.

4.3   Conceptualisation of the Black Box of the Customer's Mind

This section incorporates the social domains of experience introduced in Sections 4.2.1 to 4.2.5 into the conceptual framework. This conceptual framework will present the basis for gathering the empirical data from the participants in the high-technology B2B sector with complex and customised products and services. Empirical investigation into these five social domains of experience from salespeople and customers may provide further evidence how interpersonal reward situations could be produced in the development and maintenance of a long-term salesperson-customer relationship.

Social domains of experience have the potential to be rewarding constructs and also influence the customer when they are positively influenced by salespeople and their cognitive performance. If this happens, the customer's brain may register these certainty, cooperation, fairness, autonomy and social status stimuli as intrinsically positive, which creates a feeling of desire (Poore et al., 2012; Tabibnia & Lieberman, 2007). Thus, the salesperson's cognitive performance, which seems to influence the social domains of experience, may have a significant impact on the customer's mind (Falcone & Castelfranchi, 2001; Rousseau et al., 1998) and on the possible production of interpersonal reward situations within the customer's mind (Dimoka, 2010; Page & Raymond, 2006; Rock, 2009; Tabibnia & Lieberman, 2007).

In Section 4.3.1, a summary of the definitions of the social domains of experience, their neurological associations and their equivalents in salesperson-customer relationships will be presented before the conceptual framework is depicted. This conceptual framework demonstrates how interpersonal reward situations could potentially be unlocked in the customer's mind.

4.3.1   Creating Interpersonal Reward Situations in the Customer's Mind

Marrying the findings from social cognitive neuroscience and the well-established psychological antecedents from salesperson-customer relationships results in social domains of experience and allows us a richer insight into how a customer makes his purchase and repurchase decision and why he provides positive WOM.

For traditional salesperson-customer researchers, this means that the customer's mind is currently a black box. As seen in Section 2.2.2, Table 3 and Section 2.2.4, Figure 7, the black box of the customer's mind can be partly represented as a dual-process framework (Bargh, 1999; Chaiken & Trope, 1999) with the emotional and logical brain networks representing the human reward system in order to obtain a simpler representation of these social processes in the human brain (Lieberman, 2007).

Social domains of experience (Sections 4.2.1 – 4.2.5) then emerge which potentially address the emotional and logical brain networks of the human reward system and which may be influenced by the salesperson's cognitive performance (Section 2.2.5). A summary of the

definition of these social domains of experience, their neurological associations and their equivalents in salesperson-customer relationships are shown in Table 7 below.

Table 7: Social Domains, Topical Definitions, Neurological Associations and Equivalents

Social Domain	Topical Definition	Neurological Association	Equivalents in a Salesperson-Customer Relationship
Certainty (Section 4.2.1)	refers to a situation with sufficient relevant information on the anticipated outcomes of behaviour and to the conviction that the available knowledge corresponds to the truth.	Certainty is registered over the limbic system, activating the medial prefrontal cortex, amygdala, nucleus accumbens and caudate nucleus before the prefrontal, orbitofrontal and inferior parietal cortex are activated, and may lead to a reward situation.	Certainty is discussed in connection with ability. The salesperson's ability can be justified in the perception of competence, predictability and consistency. Therefore, certainty relates to skills and motivation and the salesperson's ability to support the customer with adequate information on a sales project.
Cooperation (Section 4.2.2)	refers to a behaviour where both interacting parties work together to achieve a common goal; it requires the renunciation of self-interest to recognise another person's personal interests and mental situation.	Cooperative performance activates the nucleus accumbens, the caudate nucleus, the ventromedial frontal/orbitofrontal and rostral anterior cingulate cortex and the mirror neurons, and may lead to a reward situation over the limbic system.	Cooperation is not only discussed in connection with the renunciation of self-interest; it also includes tangible and intangible mutual knowledge transfer from the salesperson to the customer, and vice versa. Cooperative behaviour refers to the benevolence of customer-oriented salespeople.
Fairness (Section 4.2.3)	refers to a decent behaviour, a just and honest mindset towards other people and to punishment when the expectation of fair treatment and the accepted rules or principles are broken.	Fair behaviour occurs in the nucleus accumbens, ventromedial prefrontal/orbitofrontal and medial prefrontal cortex and the ventral and dorsal striatum, and has the potential to lead to a rewarding mindset over the limbic system.	Fairness is discussed in salesperson-customer relationships in connection with objectivity, honesty and openness. Fairness refers to integrity within the relationship between the salesperson and his customer, and presupposes that well-balanced conditions will be developed during the sales conversations.
Autonomy (Section 4.2.4)	refers to a state of self-reliance, self-determination and the freedom to make decisions, and to the control and the choice of each individual.	Autonomous actions increase activity in the anterior cingulate and anterior insular cortex and may produce a rewarding situation including activity in the medial prefrontal cortex, amygdala nucleus accumbens and caudate nucleus.	Autonomy is often discussed along with the dependence between the two interacting parties. Autonomy refers to mutual dependence and to the need of a salesperson to maintain an exchange relationship with a customer to achieve their mutual business objectives.
Social status (Section 4.2.5)	refers to an individual's social position within a social structure or the assignment of a position to	Perceiving a positive change in social status triggers the brain regions of the dorsomedial prefrontal, medial prefrontal	Social status is often put in context with similarity, business experience and knowledge. This results in a

	a system of social hierarchy and to interacting actively in conversations.	and precuneus/posterior cingulate cortex and the striatum, and may address the reward region.	higher professional status which is perceived as a higher decision-making autonomy. Therefore, social status refers to the determination of the social power which will be attributed to the salesperson and the customer during their interactions.

Different sources (Decety et al., 2004; Grover & Coppins, 2012; Huettel et al., 2005; Izuma et al., 2008; Lamarre & Shoham, 1994; Lee & Reeve, 2012; Muscatell et al., 2012; Rilling et al., 2002; Ryan & Deci, 2006; Sanfey, Rilling, Aronson, Nystrom, & Cohen, 2003; Tabibnia & Lieberman, 2007; Tabibnia, Satpute, & Lieberman, 2008; Thayer, Ahs, Fredrikson, Sollers, & Wager, 2012; Walton et al., 2004)

In salesperson-customer interaction, the human reward system seems to be often activated and may produce interpersonal reward situations in the customer's brain without the majority of salespeople being aware that their customer's unconscious mind is involved (Bateman & Valentine, 2015; Locander, Mulki, & Weinberg, 2014). The challenge is now to unlock this situation and to make the salespeople aware of it. Furthermore, there is underlying potential in explaining how the unconscious as well as the conscious part of the human reward systems work.

Within this study, the black box of the customer's mind consists of the human reward system and the explanation of how interpersonal reward situations could be produced. Admittedly, the black box of the customer's mind could include much more than only the human reward system. To date, the study of market and purchase behaviour and decisions has consisted exclusively of inferences, and has not yet included all of the findings which have emerged from the investigations of functional neuroimaging techniques (de Oliveira et al., 2014) (Section 2.2.1).

In the salesperson-customer context, the customer's temporary mental state is dependent on the current situation he finds himself in. This situation itself is dependent, amongst other things, on psychological and social value functions such as past experience with a specific product, a brand, a salesperson or a company that drives the customer's commitment and choice (Dowling, 2002). Thus, a salesperson who is talking to a prospective customer must endeavour to deduce the mental state that the customer is in at that time. This is not to say that it is an easy task to understand the customer's social situation and his mental state. However, the understanding of the concepts of empathy, mentalising, intuition, emotion control, generosity and reciprocity (Section 2.2.3) and how their processes work in the human brain will help to shed light on the customer's social situation and his mental state. These concepts were discussed in connection with the salesperson's cognitive performance in Section 2.2.5.

According to social cognitive neuroscience researchers such as Lieberman (2007), the ability to represent the mental states of other human beings is explained by two important findings about the human brain and its processes: firstly, unlike other beings in the world, humans have minds which contain thoughts and feelings, and secondly, their minds develop a theory of how other human minds work and react to events within their immediate vicinity. Thus, the salesperson's brain interacts with the customer's brain and because of the thoughts and feelings, these unconscious interaction processes can be consciously experienced in their brains.

Behavioural patterns consisting of unconscious and conscious components (affective and cognitive) could be elicited from the investigation of the social domains of experience of certainty, cooperation, fairness, autonomy and social status. The fact that the black box of the customer's mind is defined in this study by the human reward system allows the unconscious and conscious components to be explained. This constitutes an explanation of *'how'* the salesperson attempts to produce interpersonal reward situations in the customer's brain. It also provides further information about *'what'* salespeople may do in front of the customer. Therein lies the immense potential of exploring such areas. These facts are conceptualised in Figure 15.

The stimulus/concept (number 1) potentially activates the respective social domain and the stimulus is received by the automatic social cognition system (limbic system), which creates an urge (number 2). The urge is registered as a conscious desire in the controlled social cognition system (neocortex), which instructs the body to act (number 3). On instruction from the controlled social cognition system, the body acts to achieve the desire (number 4). Activity triggers the signal back to the automatic social cognition system (limbic system), which releases neurotransmitters (number 5). Neurotransmitters raise the circulating dopamine levels and create a feeling of satisfaction in the controlled system (neocortex) (number 6). If the customer's mental state can be fully or partially estimated, and if the salesperson is familiar with the concepts which are the subject of the current investigation, the customer's human reward system will be activated and an interpersonal reward situation will be created (number 7). The social domains of experience may also be influenced by the salesperson's cognitive performance in such a way that a negative urge similar to physical pain is received in the customer's automatic social cognition system (Eisenberger et al., 2003). This could lead to a threat response, and may have a negative influence on the customer and the resulting consequences of his interaction with the salesperson.

However, the production of interpersonal reward situations seems to be important because they may lead to a better understanding of how a long-term salesperson-customer relationship is developed and maintained, and how a customer potentially makes the decision to purchase, to repurchase or to recommend. The salesperson-customer research community already knows what salespeople do to establish, develop and maintain a long-term salesperson-customer relationship with specific relationship antecedents, as discussed in Section 3.3.3. But what is still not known is how salespeople attempt to produce interpersonal reward situations that may lead to the development and maintenance of a

long-term salesperson customer relationship and how the human brain processes behind that work.

The five social domains of certainty, cooperation, fairness, autonomy and social status may activate the human reward system, which seems to offer the possibility to produce interpersonal reward situations.

Figure 15: Conceptual Framework and Black Box of the Customer's Mind
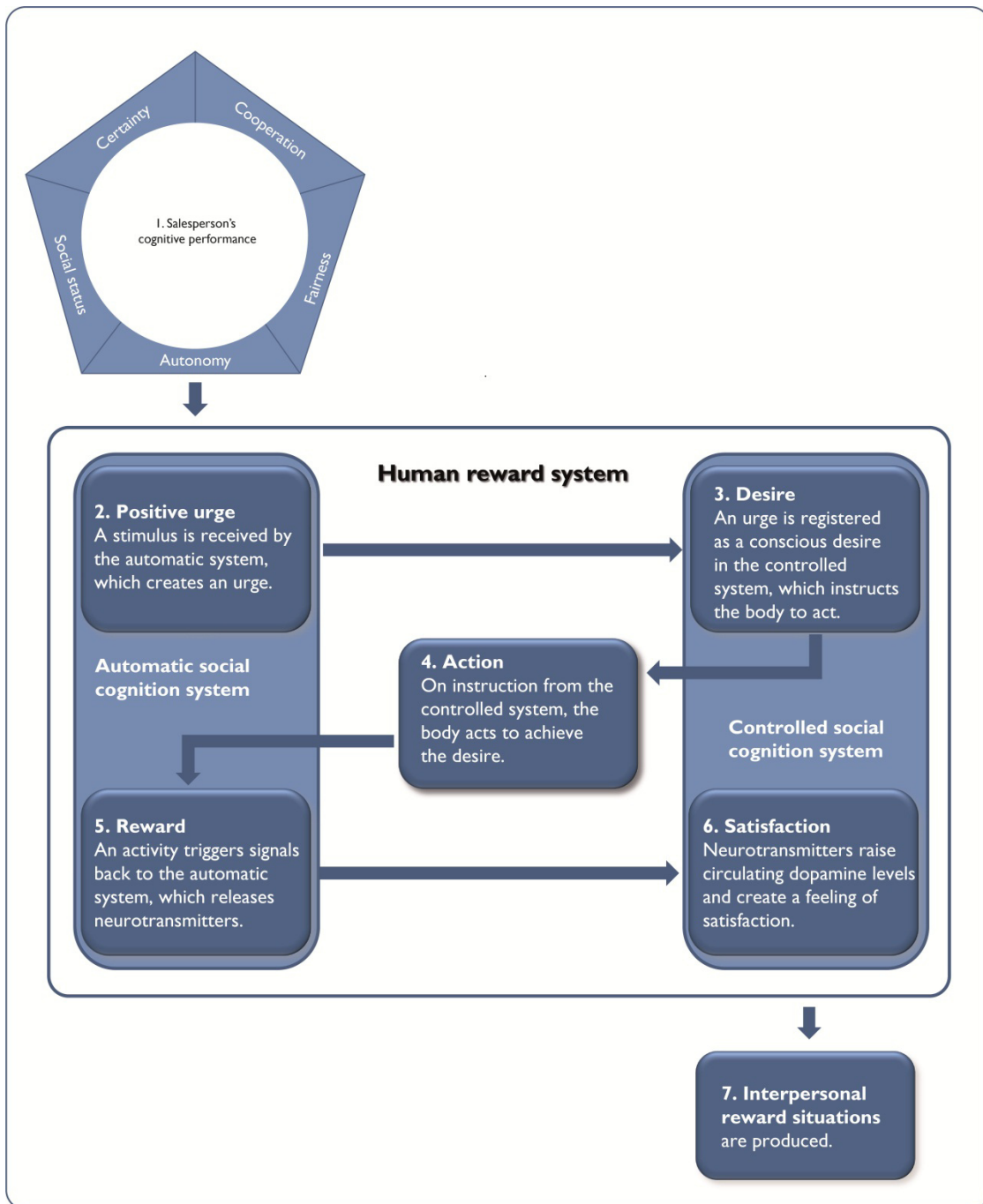
Source: Author

However, this does not mean that the human reward system should be influenced as a permanent reward system by the salesperson. Instead, the reward system should activate and deactivate the different social domains so that a habituation effect does not occur. This is important due to the short-term nature of satisfaction, which was discussed in Section 3.3.1.3, and the fact that the customer's expectations are always increasing (Santos & Boote, 2003). Researchers have not yet agreed on whether satisfaction is only important at the beginning of a customer relationship or also in the further course of the relationship (Bowden, 2009). However, by ensuring that no habituation effect occurs, this ensures that interpersonal reward situations may be produced repeatedly during the course of the salesperson-customer interactions, and that a permanent positive stimulation of the human reward system is never omnipresent. If permanent stimulation takes place, the stimulus gradually weakens and may be lost forever (Denny et al., 2013). This effect is obviously not desirable because the customer's brain could get used to the habituation effect, meaning the salesperson's stimulation of the social domains of experience would have no further effect on the development of a salesperson-customer relationship. As a consequence, it would be hard for the salesperson to maintain and enhance the relationship with his customer.

A second important fact emerged during the literature review on trust and the trust-building process in salesperson-customer relationships. It is evident that trust is developed with positive interactions over time (Weber et al., 2005). With the production of interpersonal reward situations, a mental state of satisfaction seems to be created parallel to this if the customer's expectations are fulfilled (W. Schultz, 2000; Schultz, 2006). Repeated situations of satisfaction could contribute positively to the development of a long-term salesperson-customer relationship, which is comparable to the trust-building process with positive interactions over the time. Thus, there must be repeated and unexpected rewarding situations for the effect to remain intact. With the possible stimulation of the social domains of certainty, cooperation, fairness, autonomy and social status, various stimuli could be received in the customer's automatic social cognition system. These rewards may thus be of a different nature (Rock, 2011). The social domains could be influenced by the salesperson's cognitive performance. The patterns with which salespeople potentially address the social domains of experience are named '*topics and concepts*' in this study. Consequently, the kinds of topics and concepts that the salesperson could use to address the social domains of experience are now of interest for further empirical investigation in this study. It is exactly these topics and concepts which are important during salesperson-customer interactions if we are to discover the patterns which salespeople seem to use repeatedly to influence the customer's unconscious mind. Therefore, this study attempts to identify such patterns with empirical data from senior executive sales people and high-level customers who have established, developed and maintained long-term relationships.

4.4   Conclusion

This chapter introduced and defined five social domains of experience, which have the potential to produce interpersonal reward situations in the customer's brain. Furthermore, this chapter presented the conceptual framework which depicts the black box of the customer's mind and how interpersonal reward situations could be unlocked in the customer's mind.

Keeping the research gap in mind, which stems from the lack of integration of the human reward system and possible interpersonal reward situations into the development and maintenance of a long-term salesperson customer relationship, this chapter further conceptualised the framework which presents the basis for gathering empirical data from the participants. The conceptual framework highlighted the potential relationship between the social domains of experience and the human reward system. Furthermore, it showed how the salesperson with his cognitive performance may activate the customer's brain process so that interpersonal reward situations may be produced. This brain process illustrated the black box of the customer's mind defined for this study.

The conceptual framework shows that the social domains of experience may be used as stimuli to activate the customer's automatic social cognition system. The customer's human reward system may be activated as a result and a potential reward is created which releases the neurotransmitter dopamine and produces a feeling of satisfaction within the customer's body. This feeling of satisfaction could be recognised by the controlled social cognition system, and could result in an interpersonal reward situation.

To date, researchers know *'what'* salespeople do to establish, develop and maintain a long-term salesperson-customer relationship, but what they do not know is *'how'* salespeople attempt to produce interpersonal reward situations in the customer's brain that may lead to the development of a long-term salesperson customer relationship, and how the human automatic and controlled social brain processes in the background function. Interpersonal reward situations can be considered positive interactions over time and are thus crucial to the interpersonal relationship (Weber et al., 2005) between the salesperson and the customer. Thus, this conceptual framework intends to clarify the process of building and maintaining a long-term salesperson-customer relationship. Chapter 5 will present the research methodology applied for this study.

5   RESEARCH METHODOLOGY

5.1 Introduction

After the extensive literature review in Chapters 2 and 3 and the synthesis thereof in Chapter 4 on how to create a window into the black box of the customer's mind, this chapter will present the research design of this study. According to Denscombe (2011), certain key factors in the design of a research study need to be considered to produce solid social research which is less likely to be criticised or produce data of questionable quality. Such key factors include the research philosophy, methodology, and methods.

Keeping these key factors in mind, this chapter is divided into nine sections. Section 5.2 will restate the study's research aim and objectives. This will followed by Section 5.3, which presents the research framework for this study. Section 5.4 will deal with the philosophical considerations and explains the researcher's standpoint. Section 5.5 will describe the research methodology and why the strategy of this study can be considered suitable, feasible and ethical. Section 5.6 will explore the differences between qualitative, quantitative and mixed methods research designs. Section 5.7 will outline the research methods and discusses how the data was gathered, analysed and interpreted. Section 5.8 will discuss the research ethics, before the whole chapter is summarised in Section 5.9.

5.2 Research Aim and Objectives

In the research field of salesperson-customer relationships, researchers and practitioners are already well versed in how to develop and maintain these relationships. However, they know little about the kind of processes that occur in the customer's mind during the development and maintenance of these relationships. The existing literature on social cognitive neuroscience and its application to market research (Meckl-Sloan, 2015; Varshney, 2016) suggests that social cognitive neuroscience can improve this understanding by providing further insights into the functioning of the customer's brain and their underlying processes. This in turn will clarify unconscious brain processes (Agarwal & Dutta, 2015).

Therefore, the aim of the current study is to discover exactly what kind of additional insights can be gained from social cognitive neuroscience into the process of building and maintaining long-term salesperson-customer relationships. This is achieved by exploring the five social domains of experience and by empirically defining associated topics and concepts which potentially address the automatic social cognition system underlying the human reward system. In so doing, the study intends to improve researchers' understanding of sales techniques and salesperson-customer interactions.

The following objectives, which were initially presented in Section 1.3, were formulated to achieve this aim:

Research objective 1: To critically review the literature on social cognitive neuroscience and its application to the field of buyer-seller relationships in general and to salesperson-customer dyads in particular.

Research objective 2: To discuss the characteristics of long-term salesperson-customer relationships and to examine the role of the human reward system in the development and maintenance of these relationships.

Research objective 3: To create a more detailed conceptual framework which combines the current knowledge of the psychological antecedents of salesperson-customer relationships with insights from the human reward system.

Research objective 4: To explore how salespeople attempt to produce interpersonal reward situations in the customer's brain.

Research objective 5: To present a finalised conceptual framework which synthesises the insights from the literature with the empirical findings, and to discuss the contributions and the implications for managers and sales staff.

5.3   Research Framework

There is a prevailing belief in scientific research that every research project requires the ontological and epistemological perspective of the researcher to justify the nature of knowledge and reality (Tuli, 2011). In addition, linking scientific research and philosophical traditions helps researchers to clarify their research framework in order to develop the research design and to define the research methodology and methods (Cohen, Manion, & Morrison, 2011). The research philosophy, methodology and methods of data collection, analysis and interpretation contribute to a research design which can be qualitative, quantitative or mixed methods in nature (Creswell, 2009). The research framework is a detailed outline of how the research aim, objectives and questions of this study (Sections 1.2 and 5.2) will be investigated. The interconnections between these components of the research framework are illustrated in Figure 16 below.

When choosing one of the above-mentioned research designs, the researcher always needs to ask which of them will produce the knowledge needed to achieve the research aim and the research objectives (Heppner, Wampold, & Kivlighan, 2008). The research philosophy contains important assumptions about the researcher's worldview. It can vary depending on the respective worldview and the study problem to be solved. There are several philosophical stances such as positivism, realism, interpretivism and pragmatism (Saunders, Lewis, & Thornhill, 2012). The research methodology describes the strategy that will be used to achieve the research aim. Qualitative, quantitative or mixed strategies (Creswell, 2009) can be used. Finally, the research methods describe how data is collected, analysed and interpreted (Silverman, 2015).

Figure 16: Research Framework
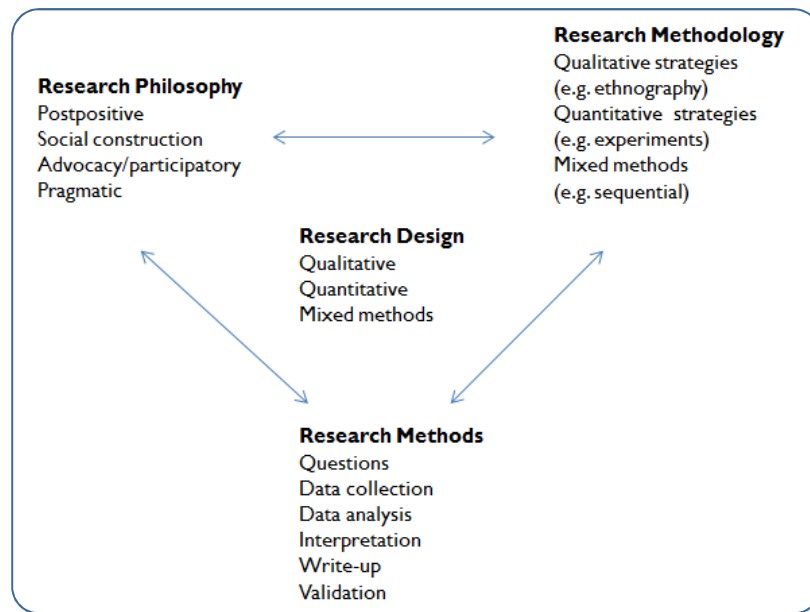
Source: Creswell (2009, p. 5)

The following Sections, 5.4, 5.5, 5.6 and 5.7, discuss each of the components shown in the research framework and are structured in such a way that one component is outlined per section. Each component discussed will be theoretically grounded and then linked to the current study's topic. This will ensure that the research problem of this study is truly reflected in the research design, and that the research objectives and questions can be discussed in their entirety. By employing this research framework and following a dedicated procedure, the researcher shows evidence that the research findings of this study can be seen as reliable, valid and generalisable (Creswell, 2009).

5.4   Research Philosophy

This section will discuss how the researcher's critical realist position differs from a positivist and an interpretivist philosophical stance. Furthermore, it will explain how a critical realist can perform empirical social research.

The philosophical underpinnings of a research study are important in general terms because they form a study's research design together with the research methodology and research method. In addition to that, the researcher's ontological and epistemological perspectives have a bearing on how his findings develop from broad assumptions to detailed methods of data collection, analysis and interpretation (Creswell, 2009). In underpinning the philosophical validation of this study, the researcher takes an ontological standpoint, which states that there is a reality but that this reality is difficult to grasp (Easton, 2010). The distinction lies between the real world and the events which are created in the real world. Empirical events are recognised and recorded by human beings, and meaning or knowledge

is always created hereupon (Aust, 2006). Hence, researchers with this standpoint accept that the real world is integrated by means of social conditions (Saunders et al., 2012). In line with this evaluation, the epistemological role of the researcher is that the confidence of the world should be seen as a universalist perspective (Easton, 2010), particularly in the analysis and interpretation of interpersonal reward situations in the development of long-term salesperson-customer relationships. Therefore, this study adopts a critical realist position (Archer, Bhaskar, Collier, Lawson, & Norrie, 2013), i.e. it refers to a transcendental realism that declines methodological individualism (Denzin & Lincoln, 2011). The transcendental realism derived from Emanuel Kant implies that individual human beings fully understand their reasoning, awareness and the restrictions of their own mind (Schoenecker, 2005).

Realism is often associated with positivism because both assume that a real world exists and both follow the inductive and deductive methods of reasoning when conducting social research (Flick, 2009). One of the main differences between these two approaches is that the real world exists for the positivist regardless of his description; whereas, for the critical realist, the real world exists only through his interpretation. The critical realist assumes that human beings are able to recognise reality and to act accordingly (Schoenecker, 2005). Therefore, for a critical realist, scientific work begins with a problem for which a solution must be sought. Hence, a critical realist approach to research includes the development of research questions which identify an empirical research phenomenon (Easton, 2010). This approach is different to an interpretivist view, in which an interpretivist only perceives the real world and sees the world exclusively as a human construction (Flick, 2009). An interpretivist collects data through observation, for example; however, a critical realist gathers data empirically from people as well as from material things (Easton, 2010). Following this line of thought, empirical research seeks intuition by systematically evaluating experiences (Bortz & Döring, 2006). With empirical social research, several very different objectives can be examined and used as the basis for the research methodology in this thesis.

This ontological standpoint and epistemological role resulted in an in-depth study in which data was gathered through face-to-face interviews and observations. The in-depth study approach is a well-known procedure in social research involving a small number of samples (Easton, 2010). The following sections will outline why the researcher chose to undertake such a study for this thesis.

5.5   Research Methodology

A research methodology usually takes a qualitative, quantitative or mixed methods form (Creswell, 2009; Harwell, 2011). The research methodology of the current study is qualitative in nature and investigates a specific group of people to discover exactly what kind of additional insights can be gained from social cognitive neuroscience about the process of developing and maintaining long-term salesperson-customer relationships. It empirically

investigates the experiences of senior executive salespeople and high-level customers in the development and maintenance of long-term salesperson-customer relationships in the high-technology B2B sector with complex and customised products and services.

As mentioned in Section 5.3, a research study must follow a methodological procedure to ensure that it is free of criticism and of a high quality. Creswell (2009) refers to the strategy of enquiry and understands this to mean the research methodology. According to Denscombe (2011), when choosing a strategy, the researcher must address key questions to determine whether the strategy is suitable, feasable and ethical.

The research aim and the objectives of the study must be reflected in the conceptual framework to determine its suitability. Furthermore, the conceptual framework should describe the conclusions which the study intends to reach (Silverman, 2015). By defining a clear research aim and objectives (Sections 1.3 and 5.2), which are reflected in the conceptual framework (Section 4.3.1, Figure 14), and by reviewing the outcomes in relation to the research objectives (Section 8.2), the present study can be deemed to be suitable.

To determine its feasibility, access to specific data sources must be ensured (Denscombe, 2011). Since this study is a relationship marketing study which focuses in-depth on the development of long-term salesperson-customer relationships in the high-technology B2B sector in Central Europe, senior executive salespeople and high-level customers serve as reliable data sources. They have a comprehensive knowledge and a holistic overview of how a long-term salesperson-customer relationship needs to be developed and maintained. A more detailed justification of why this sample selection was chosen can be found in Section 5.7.1.

With regard to research ethics, the researcher is responsible for maintaining the privacy of all participating parties and preventing deception of any kind (Bell, 2010; Flick, 2009). Within the current study, special attention was paid to the key principles of research ethics throughout the entire research process to ensure that the study participants remained anonymous and that the collected data was treated confidentially. The researcher rigorously adhered to the research ethics regulations throughout his entire investigation. A full explanation of these regulations can be found in Section 5.8.

The following two sections will explain why a qualitative methodology was the most appropriate for this study. Section 5.5.1 will explain why a cross-sectional approach was chosen, and Section 5.5.2 will clarify why the exploratory concept was the most suitable one.

5.5.1   Cross-sectional or Longitudinal Research

A major difference in the design of a study is the distinction between cross-sectional and longitudinal research. In cross-sectional research studies, the data is collected at a point in time or in a short span of time by conducting a single survey on the subject (Diekmann, 2011). Such snapshots are related to an object at a specific moment in time and can be employed in qualitative as well as in quantitative research studies (Bryman, 2012; Flick,

2009). The current study is cross-sectional in nature because data needed to be collected from a representative group of people with specific characteristics in a certain industry.

Cross-sectional studies are best suited to studies with specific questions and they are less expensive than longitudinal research studies (Rindfleisch, Malter, Ganesan, & Moorman, 2008). In longitudinal research studies on the other hand, the data is collected over a longer period of time via a survey on the subject that is repeated at different intervals (Diekmann, 2011).

Longitudinal studies are used to investigate processes or developments, and repeat questions are asked in regular time intervals (Flick, 2009). Longitudinal studies are preferable when predictions and results are unclear. They are also more time- and cost-intensive than cross-sectional studies (Rindfleisch et al., 2008).

While it would certainly have been interesting to follow the development of a long-term salesperson-customer relationship, a cross-sectional design was chosen for the present study, which involved the collection of data from a small group of senior executive and high-level participants over a short period. This was mainly because the holistic experiences of the participants were under investigation and not the process or the development of the relationship itself. Secondly, senior executive and high-level participants often have comprehensive technical as well as managerial knowledge. In addition to that, they have priority access to information which could be helpful in the investigation of social domains in the development and maintenance of long-term salesperson-customer relationships.

5.5.2   Exploratory, Descriptive or Explanatory Research

It is difficult to explain the production of interpersonal reward situations in salesperson-customer interactions with the current approaches in social research because the existing literature has not yet fully incorporated the newest neuroscientific findings into the majority of investigations. A central reason for this is that the tools and methods which researchers use to investigate the brain and the underlying structures are still very new, especially in terms of how people see themselves and others and how they cooperate with each other (Dimoka et al., 2007; Lieberman, 2007), which means the topic of producing interpersonal reward situations in the customer's brain is not yet well understood. Therefore, the current study is exploratory because empirical data needed to be collected, sorted and reduced so that topics and concepts emerge (Remler & Van Ryzin, 2010; Ritchie, Lewis, Nicholls, & Ormston, 2013) which have the potential to improve researchers' and practitioners' understanding of a long-term salesperson-customer relationship with to date uninvestigated empirical insights.

Exploratory designs are needed to explore variables and their relationships when they are unknown, and data is collected and evaluated in qualitative terms (Harrison & Reilly, 2011). While exploratory research studies review, systematically organise and synthesise the raw data from interviews or observations, descriptive studies use the organised data to identify key aspects and to map the range and diversity of each phenomenon into classification

typologies (Ritchie et al., 2013). Explanatory research studies examine why and how a phenomenon is the way it is. Hence, explanatory designs are used to build relationships between variables, and the data is collected and analysed quantitatively (Harrison & Reilly, 2011).

Thus, based on the research aim and the objectives, this study is exploratory and qualitative, and not explanatory and quantitative in nature because it seeks in-depth knowledge from senior executive salespeople and high-level customers in the high-technology B2B sector. The following section will discuss the research design chosen for this study.

5.6   Qualitative, Quantitative or Mixed Methods Research Design

The methodological approach, procedure and specific methods of evidence collection, analysis and interpretation result in a research design that is qualitative, quantitative or mixed methods in nature (Bell, 2010; Creswell, 2009; Harrison & Reilly, 2011). In a qualitative research design, researchers choose their participants purposefully and they include only a few samples in their investigations (Flick, 2009). The data collection is generally carried out with open-ended questions to get a holistic picture of the phenomenon to be investigated. The goal is to discover many new facts about the participants, such as their experiences, perspectives and histories, to place them in a context and to develop a theory (Ritchie et al., 2013). Hence, qualitative research includes in-depth analysis of a small group of participants to guide and support the construction of theory (Silverman, 2015).

Quantitative research usually starts from a theoretical construct and predefined hypotheses (Flick, 2009). The collection of data is carried out in a standardised manner. In contrast to qualitative studies, quantitative studies allow no deviation from the data collection tools. The goal in quantitative studies is to produce causality between variables, thereby testing hypotheses, and to produce a generalised form of a theory (Ritchie et al., 2013). Hence, in quantitative research designs, numerical analysis of the relationship between variables is performed (Silverman, 2015).

The mixed methods research design needs both the aforementioned strategies, and it tries to eliminate the weaknesses of both strategies and to emphasise the strengths (Harrison & Reilly, 2011). Finally, the findings of both approaches are triangulated. Within the mixed methods strategy, there are other subdivisions to embed a social science study in a research design, such as exploratory sequential and explanatory sequential (Fetters, Curry, & Creswell, 2013). In an exploratory sequential design, qualitative data is collected and analysed. It is then followed by a stage of quantitative data collection and analysis. In an explanatory sequential design, the order of data collection and analysis is the other way around than in the exploratory sequential design.

On the basis of this research design discussion, it is obvious that various combinations of these components are possible. This means that specific decisions must be made during the

research process when a qualitative, quantitative or mixed method research design is selected. Therefore, it is important that the characteristics of the individual methods are known.

Within a *qualitative research design*, the researcher attempts to interpret empirical patterns. For example, data is collected narratively by means of interviews or observations, then interpreted and a subsequent theory is formulated (Creswell, 2009). This procedure is regarded as an *inductive approach* to the relationship between theory and research (Bryman, 2012). Within the *quantitative research design*, the researcher tests a theory with specific hypotheses. For example, data is collected by means of a questionnaire to confirm the hypotheses. Afterwards, the data is evaluated statistically and a theory is tested based on the data evaluations (Creswell, 2009). This procedure is viewed as a *deductive approach* to the relationship between theory and research (Bryman, 2012). Within the *mixed methods research design*, the researcher uses quantitative and qualitative methods to emphasise the strengths of both methods (Creswell, 2009). The mixed methods combination is increasingly being used in research to eliminate the weakness of just using one single research method (Flick, 2011).

An inductive approach was deemed to be the most appropriate choice for the current study because it is unclear how salespeople attempt to address the automatic social cognition system, which has the potential to produce interpersonal reward situations in the customer's brain. It is also unclear what salespeople deliver in certain customer contact situations to ensure that the social domains of experience positively influence the customer's unconscious mind. Therefore, the goal was to investigate *"what"* salespeople do in front of the customer and *"how"* they do it. This resulted in specific, empirical emerging topics and concepts for each of the social domains of experience (Chapter 7). A deductive approach was not considered to be appropriate because no theory and no specific hypotheses needed to be tested in this study. It would have been possible to take an abductive approach because open-ended and closed-ended questions were asked during the in-depth interviews. An abductive approach addresses the weaknesses associated with inductive and deductive approaches and tries to eliminate these weaknesses (Saunders et al., 2012). Despite this, this approach was not used because the closed-ended questions were subordinate to the open-ended questions and contributed additional information for deeper clarification of the respective open-ended question. Section 5.6.1 will discuss the qualitative designs, and Section 5.6.2 will explain why an in-depth study research was chosen.

5.6.1   Qualitative Designs

The present study is exploratory and qualitative in design. This setup is aligned with the definition of qualitative research, which attempts to understand a social human phenomenon and to explore and interpret data from individuals and members of a small group (Silverman, 2015). The social issue facing this study is that it is becoming increasingly difficult for sales

personnel to understand what kind of mental processes occur in the customer's mind when they are deciding to buy a product or service.

To understand this phenomenon, the research process involved emerging questions, data collection from the study participants, content analysis of the data on statements, and interpretation of the data by the researcher. In so doing, the research strategy (Section 5.5) and the research design (Section 5.6) have to fit methodologically (Bryman, 2012). In this section, various qualitative research designs and procedures will be highlighted to integrate the aforementioned social problem into the most suitable research design. Following this, the decision to use an in-depth study approach for the current investigation will also be explained.

This study is not an *ethnography* because the researcher is not examining a cultural group in a natural setting (Creswell, 2009). An ethnographer is a researcher who shares and describes the lives of people and cultures, not what he observes, to then formulate a theory (Denscombe, 2011). This study is also not *grounded theory* because the researcher is not focusing on the process of theory construction, but rather on the expected results (Creswell, 2009). The grounded theory researcher is open to discovering new and relevant factors to a theory. The field work is complex and intense. The theories are grounded in empirical research, and explanatory theories of human behaviour are developed (Denscombe, 2011). It is not *phenomenological research*, because the researcher is drawing on his own personal experience and not focusing exclusively on the experience of people (Creswell, 2009). This procedure focuses more on the opinions, beliefs and feelings of people. The goal here is to understand, describe and interpret these, and not to measure and analyse them (Denscombe, 2011). It is also not *narrative research* because the researcher is not gathering stories of individuals and reflecting on these stories in a narrative chronology (Creswell, 2009). Finally, it would have been possible to carry out a *case study,* where a qualitative procedure is pursued in which the researcher engages in an in-depth examination of a programme or process of one or more individuals (Creswell, 2009). The advantage of a case study is that real details of a contemporary situation can be gathered. Furthermore, a case study does not necessarily dictate the methods used, but rather the scope and the scale of an investigation. Case studies are predictable in terms of time and activities, and data is collected in a specific field (Denscombe, 2011). However, the sample which was needed for this study was so specific that a case study was not pursued any further.

This research study is an in-depth study which focused on senior executive salespeople and high-level customers in the high-technology B2B sector in Central Europe. An in-depth study was pursued because it makes it possible to investigate a problem to a certain depth (Bell, 2010), such as the exploration of social domains of experience in the development and maintenance of long-term salesperson-customer relationships in the B2B context. Qualitative in-depth studies have a long tradition in B2B marketing (Beverland & Lindgreen, 2010). Researchers who choose an in-depth study approach aim to identify the unique features of a specific sample in a specific environment. Hence, an in-depth study offers predominantly qualitative data which gives comprehensive insights into a phenomenon of an organisation, community or a particular group of people (Easton, 2010).

5.6.2   In-depth Study Research

This section describes the process of carrying out the current research in the development of long-term salesperson-customer relationships. After the introduction on in-depth study research, this section will be divided into three subsections which highlight the different phases of data collection: the pilot phase (Section 5.6.2.1), the main phase (Section 5.6.2.2) and the subsequent phase (Section 5.6.2.3). These subsections also describe how the data collection phases proceeded.

An in-depth study can be quantitative or qualitative in nature (Bryman, 2012). A quantitative study is typically survey-based, whereas a qualitative study is usually interview-based and focuses on a single interviewee. This study is designed as an in-depth qualitative study (Bell, 2010) that includes the following steps: (1) plan by identifying the relevant research aim, objectives and questions (Section 1.3); (2) design by formulating a definition of the samples to be studied (Section 5.7.1), identify the research design (Section 5.6), and define the quality procedure (Section 5.7.7); (3) prepare to collect data, such as from interviews (Section 5.7.2), and observations (Section 5.7.3) for the in-depth study by improving the skills of the researchers, developing the in-depth study protocol and conducting a pilot study (Section 5.6.2.1); (4) collect in-depth study data with the help of the study protocol (Section 5.6.2.2), and use different data sources (Section 5.6.2.3); (5) analyse the in-depth study data with the chosen analytical technique (Section 5.7.4), explore the explanations and display the data separately from the interpretation (Section 5.7.5); (6) report the in-depth study data by composing the material, presenting enough evidence so a conclusion can be drawn. Finally, rewrite and review until a satisfactory result is achieved.

As indicated at the beginning of this section, the data collection in this study was divided into a pilot, a main and a subsequent phase. An overview of the participants, sample breakdown and data collection phase is provided in Table 8.

Table 8: Participants and Sample Breakdown, including Data Collection Phase

Participants	Sample breakdown	Data collection phase
3 salespeople from 3 different high-technology companies	1 vice president application and sales 1 area sales manager 1 key account manager	Pilot phase
15 salespeople from 15 different high-technology companies	4 sales managers 1 application and sales manager 5 sales directors 1 sales and marketing director 4 chief executive officers and sales directors	Main phase
4 customers from 4 different high-technology companies	3 purchase directors 1 head of division logistics and purchasing	Main phase
3 observations of initial salesperson-customer meetings from 6 different high-technology companies	3 senior salespeople and 3 senior customers	Subsequent phase

Source: Author

The pilot phase for initially testing the interview guides and for getting used to the interview process took place with three salespeople; one working as a vice president of application and sales, one as an area sales manager and one as a key account manager. In the main phase of the data collection, interviews took place with a total of 15 sales personnel and four customers, each from a high-technology B2B company in Central Europe. Finally, in a subsequent phase, three observations were undertaken, each with one senior salesperson and one senior customer. The interview guides can be found in Appendices A and B, and the structured observation protocol in Appendix C.

An in-depth study procedure is one of the most difficult to follow, because no standard procedure can be followed (Silverman, 2015). For this study, the researcher had to develop his own data collection procedure and relevant data collection tools such as the two interview guides and the structured observation protocol. These tools were developed in various steps and as the researcher gain experience of the study procedure. All of the data collected had to be of the highest quality and relevant data had to be included for the chosen analysis techniques. The pilot phase helped the researcher to overcome these initial uncertainties (Section 5.6.2.1).

5.6.2.1   Pilot Phase

During the pilot phase, the first interviews for this study were conducted with three participants from the greater Zurich area (Section 5.6.2, Table 8). The appointments were made by telephone. All the pilot interviews were conducted in Swiss German, transcribed into German afterwards and finally, typical quotes were translated into English. During the interviews, the answers were tape-recorded and the main points were written down at the same time in an interview protocol. At the end of each interview, oral approval was received from the interviewees so that all the data collected could be used in this study. All the oral approvals were tape-recorded and are safely stored with the researcher of this study.

During the pilot phase, the researcher realised that he needed to be more patient and more focused when listening to the participants; he also had to work out exactly which answers needed to be listened to more closely to achieve the research aim and to reach the research objectives appropriately. After these new findings, the interview guide for the sales personnel could be defined in more detail, also in part due to the researcher's deepening understanding of the literature review process. The interviews became more predictable over time, which meant the researcher could carry them out more easily as he progressed.

The pilot study revealed the following results and helped the researcher to make necessary adjustments, which were then later implemented in the in-depth study:

- Throughout the three pilot interviews, the questions for the salesperson's interview guide could be adjusted and improved until a final interview guide for salespeople was developed (Appendix A). In this way, the weakness of badly articulated interview questions could be counteracted.

- Throughout the three pilot interviews, the questions for the customer's interview guide could be adjusted and improved until a final interview guide for customers was developed (Appendix B). In this way, the weakness of badly articulated interview questions could be counteracted.

- Throughout these interviews, additional evidence such as emerging topics and concepts was discovered, which led the researcher to adapt the research design and develop the guiding framework (Section 1.2, Table 1) and the conceptual framework (Section 4.3.1, Table 15) further.

In summary, within the pilot phase, the apparent weaknesses of interviews were eliminated, and the strengths, such as their direct focus on the study topic, came to the fore (Silverman, 2015). Furthermore, the questions were reworked and the research design and conceptual framework were supplemented, as is suggested by Yin (2009). The reworked questions were used for the interviews in the main phase (Section 5.6.2.2).

5.6.2.2 Main Phase

In contrast to the interviews in the pilot phase (Section 5.6.2.1), the interviews in the main phase required less time and resources. For this reason, it was important to define the parameters and to learn from the pilot phase to decide on and define the next steps (Silverman, 2015). In such situations, Denscombe (2011) suggests that the participants should not be randomly selected, but rather chosen in accordance with certain requirements. As mentioned earlier, senior executive salespeople and high-level customers from the high-technology B2B sector in Central Europe were purposively selected for this study. This provided a detailed insight and data into the development and maintenance of the salesperson-customer relationships and enabled the topics and concepts of the five social domains of experience to be identified, explored and elaborated.

The participants for the main phase were chosen based on their experience as a sales manager, area of operations in Central Europe and work within the high-technology B2B sector with complex and customised products and services. As in the pilot phase, there were salespeople interviewed with several years of experience in the business. According to Denscombe (2011), this deliberate selection of participants is an essential part of the methodology. In addition to that, the participants for this study were also selected in accordance with the criteria of access, convenience and geographic proximity (Yin, 2009).

During this main phase, 15 interviews with senior executive salespeople and four high-level interviews with customers were conducted in Central Europe. The appointments were also made by telephone. As in the pilot phase, all the main interviews were conducted in Swiss German, transcribed into German afterwards and finally, typical quotes were translated into English. During the interviews, the answers were tape-recorded and the main points were written down at the same time. At the end of each interview, oral approval was received

from the interviewees so that all the data collected could be used in this study. All the oral approvals were tape-recorded and are safely stored with the researcher of this study.

5.6.2.3   Subsequent Phase

In the subsequent phase, three structured participant observations of initial salesperson-customer meetings were carried out. Each of the participants worked in different high-technology companies in Central Europe. All the salespeople and customers observed worked at senior executive level.

These initial meetings were each set up by the researcher's second supervisor, who has been engaged in postgraduate management education for more than 20 years at various universities and therefore has a network of over 1,000 alumni. He is involved in business development and entrepreneurship with his network of highly experienced, locally based partners. The researcher was present as part of normal business and as a sales consultant to give feedback to the salesperson in question at the end of the discussion so that his relationship with the customer could be successfully established. The researcher was not involved in the initial discussions at any time. Hence, the researcher's role was to observe and to answer any sales-related questions which arose at the end of the meetings.

The meetings were held in Swiss German. Field notes were made in German. Typical field notes and descriptions of scenes were translated into English and used for the present study. During the observations, relevant field notes on the topic and concepts of the social domain of certainty (Section 7.2.1) were written. Details of the procedure can be found in the structured participant observation protocol in Appendix C. At the end of each observation, the researcher explained to the participants in the meetings that they had been observed for the present study. Moreover, approval was received from the interviewees so that all the data collected could be used further.

5.7   Research Method

The research method describes how data is collected, analysed and interpreted (Creswell, 2009). Following on from the previous methodological discussion and as described by Flick (2009), the research process involves a series of strategically important steps that systematically investigate a problem and certain aspects of the subject that are expected to contribute to the research topic.

Firstly, it is essential that the information for the data collection comes from reliable sources and can be elicited by trusted methods. Data collection must then be performed for all study participants in the same way to ensure that differences in the results cannot be attributed to differences in the study participants (Flick, 2009). This means that sufficient evidence needs to be collected. Secondly, as already indicated, the goal of the data sampling is to draw a specific sample selection and then to generalise these results to the population (Denscombe,

2011). With a smaller amount of data, it is possible to maintain homogeneity and to improve the quality and the accuracy of the data set (Flick, 2009). Thirdly, the general objective of the data analysis is to determine similarities and differences in the available data from sources such as interviews and observations (Diekmann, 2011). The qualitative method focuses more on the development of a theory by employing various methods of encoding data (Flick, 2009).

One question that is often asked relates to the quantity of the evidence required to competently answer the research question. No clear cut-off point for the completion of data collection can be set. Data and evidence should be collected until a confirmatory status is well established so that the research aim can be achieved and the research objectives reached (Bell, 2010).

The literature commonly describes six sources of evidence (Bell, 2010; Denscombe, 2011): documentation, archival records, interviews, direct observations, participant observations and physical artefacts. High-quality studies apply evidence from two or more different sources (Silverman, 2015). Depending on the time available to the researcher, multiple data collection methods are possible (Flick, 2009).

In the present study, evidence was collected from two sources, namely through face-to-face interviews (Section 5.7.2) and participant observations (Section 5.7.3). 18 senior executive salespeople and four high-level customers from the high-technology B2B sector in Central Europe were purposively sampled and data gathered via 22 in-depth face-to-face interviews and three structured participant observations. This provided a detailed insight into the development and maintenance of the focal relationships and enabled the topics and concepts of the five social domains of experience to be identified, explored and elaborated. Both data sources have their strengths and weaknesses, which are outlined in Table 9 below.

Table 9: Sources of Evidence: Strengths and Weaknesses

Source of Evidence	Strengths	Weaknesses
Interview data	- Data is goal-oriented and focuses directly on the study topics - Data is revealing and provides perceived causal explanations	- Possibility of poorly articulated questions - Bias due to disguised answers - Participants may not be fully open with their answers and say what interviewer wants to hear
Participant observations	- Researcher himself is part of the observation, which is more natural than with other methods - Provides rich insights into complex realities - Data has potential to be particularly sensitive to context	- Limited opportunities for researcher to participate - Potential problems in generalising from the research - Very demanding method in terms of personal commitment

Source: adapted from Bell (2010) and Denscombe (2011)

The challenge during the data collection phase of this study lay in reducing the weaknesses of the sources of evidence to a minimum, thereby ensuring their reliability, replicability and validity. According to Bryman (2012), the evaluation of these criteria largely depends on the

researcher's opinion as to whether the criteria are relevant to the assessment of the in-depth study, or not. However, to ensure a high-quality study, the weaknesses of the sources of evidence were successively eliminated during the interviews in the pilot phases by adapting the interview guide after every interview (Section 5.6.2.1).

For this study, it was crucial that these weaknesses were already taken into account during the pilot phase because special attention could be paid to the quality criteria in later phases of the study. The interview guide questions were linked to the literature review and emerged from the discussion and synthesis of the social domains of experience (Section 4.2). The quality of every in-depth study needs to be tested, which means the different quality points that ensure a high in-depth study quality, such as reliability, validity, generalisability and objectivity (Section 5.7.7), must be adhered to in the data collection, analysis, and interpretation phases (Bryman, 2012; Denscombe, 2011). By pursuing an in-depth study with data gathered by face-to-face interviews and structured participant observations, the weaknesses of evidence collection were addressed by the researcher so that this study can be considered reliable, replicable and valid.

5.7.1   Sample Selection

In social science, there is a general understanding that a researcher cannot interview and observe everyone, or send out questionnaires to every single person who is suitable for the research topic. In the same vein, researchers are not able to read and analyse the content of all related literature of interest (Bryman, 2012). Time and costs are always limiting factors in a research study (Bell, 2010). Therefore, researchers must select samples which make it possible to elicit precise information about a population. The population are all members of a particular group of interest and the sample is a number of people chosen for the topic to be studied (Denscombe, 2011).

Purposive sampling is often carried out in qualitative research studies in general, whereas in quantitative studies, researchers often rely on probability sampling techniques. During probability sampling, researchers make use of a random selection of samples. In purposive sampling, researchers approach specifically selected participants who represent a numerically very small or hard to reach group of people (Silverman, 2015). Purposive sampling is used because the researcher is interested in a special set of people with specific characteristics in a specific environment. Such a group of people can provide in-depth data on a specific problem. This is mainly the case with small-scale social research projects (Denscombe, 2011).

In the present study, purposive sampling was carried out. For the in-depth face-to-face interviews, the target population of the investigatory field consisted of 18 senior executive sales personnel and four high-level customers from 22 high-technology B2B companies located in Eastern Switzerland, Liechtenstein, western Austria and southern Germany, an area which is referred to as Central Europe in this study. For the structured participant observations, the target population consisted of three senior salespeople and three senior

customers from companies based in the same area as the companies where the interview participants were employed. These high-technology companies develop, manufacture and distribute complex and customised products and services such as machines, systems, components or infrastructures. These customer-specific products and services are sold by regional sales teams or distribution companies with regional responsibilities. The sales personnel provide high-level consulting and support services, which means they spend a considerable amount of time with their customers. In this setting, sales personnel therefore need to be extremely trustworthy and have a high level of commitment and expertise (Winkelmann, 2008). This context was chosen for the following reasons:

- Firstly, the high-technology B2B area is an ideal setting in which to test the salesperson-customer exchange because sustained industrial research projects are usually carried out in a complex field with the latest technology.

- Secondly, desirable long-term salesperson-customer relationships are available in which the customer can develop trust in and interact with the salesperson over a long period.

- Thirdly, in the high-technology B2B environment, the staff turnover rate is relatively low. Employees retain their positions for a relatively long time and have an in-depth knowledge of the technology and its related processes.

The participants in this study are sales personnel and customers who have been working in this field for several years and as a result have a wealth of experience. A demographic description of the participants is provided in Table 10 below.

Table 10: Demographic Description of the Participants

Participants	Age	Position and Experience	Products and Industries	Sales Area
Salesperson 1	50–60	- Vice President Application and Sales - Sales since 1986	- Preclinical magnetic resonance imaging spectrometers - Serves customers in the academic, pharmaceutical, industrial, clinical and applied markets	- Switzerland - Scandinavia - Asia Pacific
Salesperson 2	30–40	- Area Sales Manager - Sales since 2005	- Industrial control and automation technology systems - Serves customers in all types of industrial markets	- Switzerland - Germany - Austria
Salesperson 3	30–40	- Key Account Manager - Sales since 2000	- Laser medical equipment - Serves customers in all types of industrial markets	- Switzerland - Southern Germany - Austria
Salesperson 4	40–50	- Sales Manager - Sales since 1998	- Mass spectrometry systems - Serves customers in the academic, pharmaceutical, industrial, clinical and applied markets	- Switzerland - Germany - Austria - Benelux
Salesperson 5	50–60	- CEO / Sales Director - Sales since 1989	- Sensor technology and control systems	- Europe, India, Middle East,

			- Serves customers in the industrial markets of semiconductor and vacuum-coating industries	- Africa - Asia Pacific - Americas
Salesperson 6	30–40	- Sales Manager - Sales since 2006	- Defence and homeland security systems and solutions - Serves customers in the industrial and defence markets.	- Switzerland - France
Salesperson 7	60+	- Sales Manager - Sales since 1989	- Power supply technology - Serves customers in the power supply and industrial markets	- Switzerland
Salesperson 8	60+	- Application and Sales Manager - Sales since 1976	- Magnetic resonance spectroscopy systems - Serves customers in the academic, pharmaceutical, industrial, clinical and applied markets	- Switzerland - Middle East and India - Australia
Salesperson 9	50–60	- Chief Executive Officer and Sales Director - Sales since 1991	- Implementation and system operation technologies - Serves customers in the industrial goods and plant construction sectors	- Switzerland - Liechtenstein - Southern Germany - West Austria
Salesperson 10	30–40	- Chief Executive Officer and Sales Director - Sales since 2007	- Implementation and operation of high-tech systems - Serves customers in the plant engineering and machine industry sectors	- Switzerland - Germany - Austria - Middle East
Salesperson 11	40–50	- Chief Executive Officer and Sales Director - Sales since 1995	- Machinery and equipment for ecological systems - Serves customers in the industrial goods sector and construction industry	- Switzerland - Liechtenstein - Southern Germany - West Austria
Salesperson 12	40–50	- Chief Executive Officer - Sales since 1994	- Machinery and equipment for ecological systems - Serves customers in the industrial goods sector and construction industry	- Switzerland - Liechtenstein - Southern Germany - West Austria
Salesperson 13	40–50	- Sales Claims and Contract Manager - Sales since 2004	- Sub-assembly and assembly of high-tech systems - Serves customers in the industrial goods and service sectors	- Switzerland - Liechtenstein - Southern Germany - West Austria
Salesperson 14	50–60	- Sales and Marketing Director - Sales since 1994	- Ophthalmology and surgical equipment technologies - Serves customers in the academic, pharmaceutical, industrial, clinical and applied markets	- Switzerland - Liechtenstein - Germany - Austria
Salesperson 15	60+	- Sales Director; - Sales since 1989.	- Precision engineering and high-tech products - Serves customers in the industrial goods and military sectors	- Switzerland - Liechtenstein
Salesperson 16	40–50	- Sales Director - Sales since 1991	- Drive and control technologies - Serves customers in the industrial goods sector	- Switzerland
Salesperson 17	40–50	- Head of Global Sales and Aftersales - Sales since 1996	- Precision components, metal and plastic systems - Serves customers in the	- Europe, India, Middle East, Africa

			automotive, aerospace, medical and plant engineering sectors	- Asia Pacific - Americas
Salesperson 18	40–50	- Sales Director - Sales since 1998	- Radar systems and high-tech measurement systems - Serves customers in the transport military industry	- Switzerland - Southern Germany
Customer 1	40–50	- Purchase Director - Purchase since 1995	- Industrial goods, plant construction and automotive - Purchasing of industrial goods and hydraulic systems	- Europe - Asia - America
Customer 2	50–60	- Purchase Director - Purchase since 1994	- Industrial goods and capital equipment - Purchasing of industrial goods and capital equipment	- Europe - Asia - America
Customer 3	40–50	- Purchase Director - Purchase since 2010	- Industrial goods and mechanical engineering - Purchasing of industrial goods	- Europe - Asia - America
Customer 4	40–50	- Head of Disvision Logistics and Purchasing - Purchase since 1997	- Industrial goods and process technologies - Purchasing of industrial goods and capital equipment	- Europe - Asia - America

Source: Author

The average age of the participants was 47 years, they had senior-level sales experience and, in many cases, they held an additional qualification in business administration (Section 6.2.2). Both of these aspects strengthen the findings of this study because the participants have in-depth practical as well as theoretical experience. The average business experience of the participants was 18 years with an average year-to-year sales volume of CHF 100 million. An average of 10 salespeople report directly to the sales and customer representatives. The participants spend approximately 1.5 – 2.5 hours in their initial meetings. A more detailed analysis of the sample selection is described in Chapter 6, and in Appendices E and F.

5.7.2   Conducting Interviews

In general, a research interview involves targeted questioning of selected individuals and builds on everyday situations of the participants (Diekmann, 2011). Interviews can be used in qualitative as well as in quantitative studies. In quantitative studies, the researcher has clearly specified research questions which form the basis for the data collection. Such interviews are structured or fully standardised (Bryman, 2012). The formulation and order of the questions are set in advance (Flick, 2009). Quantitative interviews contain mostly closed-ended questions, and aim to obtain similar answers from all the participants so they can then be compared and statistically analysed (Bryman, 2012; Flick, 2009).

In contrast to quantitative studies, the researcher initially formulates research ideas and focuses more on the perspectives, experiences, feelings or thoughts of the interviewees when conducting qualitative or in-depth studies (Bryman, 2012). In qualitative studies, the researchers are mainly interested in live stories of other people to explore various aspects of the human experience. Qualitative or in-depth interviews are either unstructured or

semi-structured, and they are the most widely used methods in qualitative research (Jacob & Furgerson, 2012). The main advantage of in-depth interviews is that they provide much more information than other research data collection methods such as surveys do (Boyce & Neale, 2006). In unstructured interviews, the questions are not prearranged and the process is mostly informal and free-flowing. The questions are open-ended and are designed to capture as much information as possible. Such interviews give insights into what the participants see as relevant and important. Unstructured interviews can differ greatly from possible targets and new questions may arise during the interview phase (Bell, 2010; Bryman, 2012; Diekmann, 2011). Semi-structured interviews are a questioning method which is situated between structured and the unstructured interviews. This study used semi-structured interview guides for the senior executive salespeople and high-level customers. Semi-structured interview guides were chosen because the researcher was interested in any new ideas which came up, and he wanted to allow the participants a semblance of freedom when answering.

An interview involves a transfer of information from the participants to the investigator and it provides a deeper understanding of the situation to be investigated (Denscombe, 2011). Needless to say, interviews must be well planned, prepared and during the interview itself, the investigator must pay particular attention to sensitive statements made by the interviewee. According to Yin (2009), the interview is one of the main sources of an in-depth study, in which the researcher has two important tasks: Firstly, he has to follow his own line of inquiry and secondly, he needs to ask questions in an unbiased way, so as to do the aforementioned.

In the case of the current study, an initial conceptual framework was developed to make assumptions and to gain a deeper understanding of the situation to be investigated; it was continuously adapted as the research process progressed. With a more detailed literature review in the respective fields of interest, the conceptual framework was elaborated (Section 4.3.2). With the extensive literature review in Chapters 2 and 3 and the synthesis thereof in Chapter 4, the identified research gap (Section 1.2) in the conceptual framework paved the way for possible interview questions. The questions in the interview guides (Appendices A and B) were designed to gather information, such as how the salesperson listens to his customers, how he uncovers his customers' needs and collects customer feedback (Petermann, 2013; Rothmeier & Dixon, 1980), all of which lead to patterns of customer behaviour and how the customer reacts in front of a salesperson (Dowling, 2002), and are clearly grounded in the literature.

With regard to the weaknesses of interviews (Section 5.7), the researcher openly addressed the weaknesses and attempted to minimise them in the following manner:

- *Poorly articulated questions* – with progressive data collection, the interview questions were adjusted in an iterative process so that more targeted questions could be asked. Furthermore, the criteria for the selection of participants (Section 5.7.1) were further refined until finally only the target persons were selected, providing specific information to answer the research questions as accurately as possible.

- *Bias due to disguised answers* – during the various phases of evidence collection (Section 5.6.2), the participants were given a clear introduction to the subject, and questions were asked by means of an interview guide. More importantly, throughout the entire process, the researcher himself did not provide any affective nor cognitive reasons for not giving information that reflected the reality. He ensured this by not giving any verbal nor non-verbal input on the interview situation unless really necessary.

- *Participant says what interviewer wants to hear* – the researcher was particularly aware of this issue during the various phases of evidence collection. This was also one of the reasons why senior executive and high-level participants were chosen. They have a certain level of confidence when giving answers, they are experienced in their business field and they have the decision-making authority to supply the real facts. This means that they talk openly about their work experience.

There were three phases in the interview sequence in this study (Section 5.6.2): preparation, the interview itself and post-processing. The preparatory phase was necessary to be optimally prepared for the upcoming interview and the interviewee. The researcher's goal was to obtain information on the activities of the interviewees and to ensure that the protocol and associated tools were in place (Bortz & Döring, 2006). As suggested by Creswell (2009) and Denscombe (2011), the interviews themselves took place in four phases:

- *Make a short briefing*: here the interviewer explained what was involved and what the objective of the interview was.

- *Trigger conversation with general and open questions:* questions were asked pertaining to age, gender, education, years of business experience, annual sales, number of employees reporting to the sales personnel and customers, and average time spent in a single meeting. These questions gave the interviewees the opportunity to speak from personal experience.

- *Maintain the flow of the conversation:* this was achieved by active listening, i.e. making a conscious effort to hear and understand what was being said.

- *Conclude and close the interview:* at the end of each interview, the interviewer thanked the participant and made mention of the important contribution that they would be making to his research and the research field in general. By asking how the interviewee felt during the interview, this gave the respective interviewee the opportunity to rethink the flow of conversation during the interview. Important issues were often re-addressed at this point. As the participants were recorded during the interview, their oral and type-recorded consent was obtained in this final interview phase.

As suggested in the literature by researchers such as Creswell (2009), the collected data was transcribed, translated and organised in a database. Relevant information contained in the taped conversation with the respective salesperson and customer was recorded in writing in a Microsoft Word and Excel files. Such a formal procedure helps to ensure the quality, validity and reliability of the collected data (Yin, 2009). It also helped the researcher to keep control over the time frame and associated activities of the study.

5.7.3   Structured Participant Observation

Observation is the act of watching a situation or a process to collect information from a primary source (Diekmann, 2011). Interviews provide data on how people perceive what is happening, but not necessarily on what is actually happening. Observations are an additional method of providing data which help researchers to find out whether people really do what they say or if they really behave in the way that they say (Bell, 2010).

Observation research in social science is divided into systematic and participant observation (Bryman, 2012). The former is mainly used when studying interactions in settings such as school groups, and is applied in quantitative data collection and statistical analysis. On the contrary, participant observation is applied when the researcher participates in the daily lives of people who are taking part in the study in question (Bortz & Döring, 2006). The researchers does it either openly or in a specific role, and he observes what is happening and listens to what is being said. This method is linked to qualitative data collection (Denscombe, 2011). Systematic and participant observation could be used in an unstructured and structured manner. Unstructured observation is designed to gather as much as information without the need to adhere to an observation protocol. Structured observations have a predefined observation protocol to systematically observe situations and record the participants' behaviour (Bryman, 2012).

The current study involved structured participant observations. One of the problems with structured participant observations is that different researchers who observe the same situation could perceive it differently. This could lead to different interpretations and results, which may lead to different conclusions about the situation to be observed (Denscombe, 2011). Therefore, it is crucial to have clear observation criteria for all researchers observing the same situation and to align the observation protocol to it (Bryman, 2012). Researchers should consider two points: Firstly, it must be clear who or what is to be observed and secondly, the related research problem must be known so that the observers know which actions must be recorded. The observation protocol must carefully identify the categories of behaviour or events being examined and under what conditions they should be allocated to these categories (Bortz & Döring, 2006). As in the face-to-face interviews and suggested by various researchers such as Bortz and Döring (2006) and Denscombe (2011), there are important steps to be considered when conducting structured participant observations: (1) Deciding the objects to be observed, (2) Determining the criteria for the observation, (3) Developing an observation protocol, (4) Choosing the framework for the observation, (5)

Preparing and conducting the observation, and (6) Analysing and interpreting the observational findings.

In the present study, structured participant observation was undertaken by attending three initial salesperson-customer meetings. These meetings were observed to examine the initial stage of a potential long-term salesperson-customer relationship. The objective of the observation was to find out how a salesperson behaves when he first meets a customer and how he attempts to foster a relationship. Furthermore, efforts were made to deduce the interests of both parties and the role they play. Each meeting took place with a senior salesperson and a senior customer from two different high-technology companies who were meeting for the first time. These initial meetings took place on 10 June 2014, on 11 June 2014 and on 18 June 2014, and they were part of a project where the researcher's second supervisor brought the buyer and seller companies together for an initial meeting. The general business objective was to develop interesting business opportunities which should be the start of a long-term relationship between the buyer and seller parties. Thus, the role of the second supervisor was the one of facilitator. The researcher of this study was officially present in the role of a sales consultant for high-technology products and services, and unofficially as the observer of the senior salespeople. This had been previously discussed with the respective line managers of the salespeople and their consent had been obtained. None of the participants knew what the researcher was investigating at the beginning of the meeting.

The senior salespeople under observation were employed in companies S16, S17 and S18, which are described in Appendix E. For the main phase, the senior executive managers were interviewed face-to-face in each case; whereas, in the subsequent phase, senior salespeople were observed in an initial meeting with a potential new customer. It is very important that salespeople and customers who meet for the first time share a common interest; otherwise, the first meeting would not even have been taken place (Ingram et al., 2008). Thus, with this setup in the initial salesperson-customer meetings, a social relationship between a salesperson and a customer was created which was discussed in the methodology Section 5.7.3. Such an intensive social relationship is referred to as a dyadic. Therefore, these situations represent a dyadic perspective (Bruhn, 2013).

Two criteria were used for this observation of the three dyadic relationships to see whether the three concepts of the social domain of certainty (Section 7.2.1) were acted out by the salesperson, and to see the order in which the three concepts occurred during the salesperson-customer interaction. It was also interesting to observe the welcome phase and the final phase of an initial salesperson-customer meeting. This first meeting of a long-term salesperson-customer relationship was further investigated because it is the first few minutes of a salesperson-customer relationship which have the greatest impact on whether this relationship even eventuates, and how it develops (Ingram et al., 2008; Petermann, 2013). The researcher observed how certainty is created in the relatively uncertain initial phase of a business relationship. For this reason, a predefined structured participant observation protocol (Appendix C) was developed. The social domain of certainty, which was focused coded during the qualitative content analysis process (Section 7.2.1), was used for the

observations with the following concepts: a salesperson can overcome a relatively uncertain initial phase in front of the customer by *clarifying the customer's expectations*, *establishing a positive relationship on a common basis*, and *demonstrating technical and social competence*.

The observation protocol for the structured participant observations is divided into five categories. Each category represents a phase of the conversation between the salesperson and his customer. In the following summary, the five phases as well as the criteria used to assess each phase of the observation are shown:

- *Phase 1: Welcome* – the welcome phase was used to introduce the participants and to familiarise them with the new situation. During this time, the participants assessed their respective social status. Furthermore, the salesperson had to make himself and his products and services attractive and set a clear agenda which he could always return to during the discussion. Within this phase, the criteria to assess the observations were twofold: (1) how the salesperson and the customer welcomed each other (wait-and-see or expectant attitude) and (2) how the salesperson tried to create proximity to the customer (eye contact, handshake, accidental contact).

- *Phase 2: Clarifying the customer's expectations* – this phase clarifies how the salesperson finds out about the customer's expectations and how he takes a cautious approach to the new relationship to understand the customer and to meet his needs. Within this phase, the criteria to assess the observations were as follows: (1) whether and how the salesperson refers to reference projects, (2) to application notes, (3) to quality standards, (4) to confidentiality agreements and (5) to utility models and items on loan. The researcher observed whether and how the salesperson adhered to these five criteria, and how he implemented them in his approach.

- *Phase 3: Establishing a positive relationship on a common basis* – this phase clarifies how the salesperson builds on his existing knowledge base and creates a fact-based situation with transparent information to establish a personal connection with the customer. Within this phase, the criteria to assess the observations were as follows: (1) whether and how the salesperson attempts to find out what the customer knows about the technology, (2) background information on the customer, (3) understands the personal situation of the customer. The researcher observed whether and how the salesperson adheres to these three criteria in his approach.

- *Phase 4: Demonstrating technical and social competence* – this phase clarified how the salesperson showed technically skilled and socially competent behaviour so that the customer experiences consistent behaviour from him at different points in time. Within this phase, the criteria to assess the observations were as follows: (1) whether and how the salesperson attempts to understand the intended applications of the product that the customer wants to buy, (2) understands the customer's technical issues, and (3) understands the customer's personal needs and preferences.

- *Phase 5: Final stage* – the final phase focused on how the salesperson arranged a follow-up meeting with the customer and how he was able to attract the customer's interest in his product. Furthermore, researcher observed how he concluded the meeting and how he presented this conclusion to the customer (flipchart, laptop, verbal). In addition to that, he also looked at how the salesperson and customer took their leave from one another (handover of customer giveaways, invitation for lunch, or an event, etc.).

As mentioned in Section 5.6.2.3, the researcher was present as part of the normal business as a sales consultant. However, he was not involved in the discussions during the first stage of the meetings. At the end of the meetings, the researcher gave his recommendations on how the relationship between the buyer and seller parties could be further developed. During the last phase of these initial meetings, once the main conversations concerning business development were over, all the parties were informed and their consent to the use of the results was obtained by the researcher.

These structured participant observations enabled the researcher to better understand the role of the technical salesperson in sales and to interpret how this research relates to that role. In addition to this, it helped him to better understand how co-creation with the customer occurs (Section 3.4.2). Section 6.2.4 will present empirical data from the three observations.

5.7.4   Recordings and Transcription

In qualitative research studies, data from the most commonly used methods of data collection, such as interviews or focus groups, should be audio recorded and transcribed verbatim (Gill, Stewart, Treasure, & Chadwick, 2008). Audio recording enables the researcher to capture '*what the participants say and how they say it*', thereby ensuring descriptive validity. The '*what*' reflects the content and the '*how*' the context (Bryman, 2012). Furthermore, audio recording offers the opportunity to listen to the permanent records repeatedly and provide other researchers with recorded data that they can check it whenever they want and use it for their research (Denscombe, 2011). There is a general understanding in the research community (Diekmann, 2011; Flick, 2011) that recordings provide sufficient data for the purpose of a research study.

Many experienced investigators such as Creswell (2009) think that all recordings need to be transcribed. Transcriptions are textualisations of tape records and can be used for further analysis, such as context analysis (Flick, 2009). The prerequisite is that an interview can be conducted quickly, and all the relevant facts recorded well and reflected on afterwards; this requires a well-planned and piloted evidence protocol (Bell, 2010). The evidence protocol includes the instrument, the procedures and the general rules for the data collection, and establishes reliability in an in-depth study. A protocol should contain the following sections: a short overview of the study project including the context, focus and aim; field procedures

such as access to the site and source of data; an interview guide with the questions to be asked; and a guide to report the data collected (Silverman, 2015; Yin, 2009).

Theory suggests that field notes are a helpful complement to audio recordings (Gill et al., 2008). Such notes can be written down during or shortly after the interview by the researcher. One advantage of field notes is that the researcher can record observations during the interview. Such field notes can describe the location, the climate or the atmosphere. In addition, field notes can provide information on the intention of a statement or on the non-verbal communication during an interview (Denscombe, 2011). If field notes are the only method of data collection in interviews, some general principles should be followed. However, it is suggested that field notes should be used in conjunction with data collection methods such as audio recordings or photography as a complementary method (Bryman, 2012).

In this study, all the interviews were type recorded and the most important statements were written down during the interviews. During the observations, field notes were made according to the criteria defined in Section 5.7.3. The important statements noted during the interviews and the field notes made during the observation were compiled and written down in the respective evidence protocol. Furthermore, the location, the climate and the atmosphere were noted in writing, along with any long pauses or wild gesticulations made by the participants. Since the interviews and observations were all conducted in Swiss German, these additional notes helped the researcher to write up the transcripts of the 22 interviews and to analyse and interpret the three observations. The transcripts were all done by the researcher himself during a three-week summer holiday in 2014. At the same time, the observations were analysed and interpreted for the first time within the context of this study.

5.7.5   Qualitative Content Analysis

In this study, empirical data gathered from salespeople and customers was available in the form of texts after the face-to-face interviews were audio recorded and transcribed. Thus, spoken data was converted into text data by means of transliteration, and then analysed using the content analysis technique (Denscombe, 2011). The text data was analysed using content analysis because it was the most efficient and effective method to interpret the meaning from the content of transcribed text data and focus on the topics and concepts of the social domains of experience. Content analysis can be used in quantitative as well as qualitative research studies (Mayring, 2010; Silverman, 2015). Other methods which could have been taken into account are ethnography, grounded theory, historical research or phenomenology (Hsieh & Shannon, 2005). Traditionally, content analysis has been used in quantitative studies to categorise and to quantify the contents of empirical data, such as counting words, terms or phrases in text, speeches or websites (Bell, 2010; Denscombe, 2011). Although content analysis was originally a quantitative method to make content quantifiable, the method has also prevailed in qualitative data analysis (Mayring, 2010). While quantitative content analysis aims to make systematic and objective quantification, there are

significant differences for qualitative content analysis. Qualitative content analysis also has the right to be systematic and objective in the data analysis, but it is not or only partially based on counting procedures. It aims at producing a concentrated representation of a phenomenon by examining significant amounts of text (Elo & Kyngäs, 2008), which means it can be defined as a method for the subjective interpretation of the content of text by systematically encoding and identify categories (Hsieh & Shannon, 2005).

Mayring (2010) divides the qualitative content analysis methods into three different techniques: summarising and inductive category formation, explication (context analysis) and structuring. The principle of summarising content analysis is to reduce the collected data so that the main content is preserved. Thereby, a level of abstraction must be created which is still representative of the base material. Summarising content analysis consists of three steps: paraphrasing, generalisation on the level of abstraction and corresponding reduction in the material units. During the explication process, additional complementary material is approached within individual passages of the gathered data. Thereby, unclear passages will be made understandable and explainable. The predefined structure is designed to deduce whether there is a specific structure in the gathered material. A structure in the form of a category system is brought into the texts to be analysed. All text modules which correspond to the grid are then extracted from the text. There is a difference between formal, content, typifying and scaling structuring.

In the present study, structuring content analysis is applied with key indicators of personal selling in the context of the high-technology B2B sector with complex and customised products and services (Mohr et al., 2010; Sharma et al., 2008) in the first part of the data analysis (Chapter 6). The goal was to illustrate how the characteristics of the high-technology B2B sector with complex and customised products and services are represented. Thus, in the first part of the data analysis, a deductive method of reasoning was used to compare the collected empirical data on the one hand, and to work out implications for personal selling and sales management on the other (Elo & Kyngäs, 2008).

In the second part of the data analysis (Chapter 7), category development within content analysis was used because topics and concepts emerged from the interview data (Mayring, 2010). The goal was to show how salespeople attempt to address the automatic social cognition system that has the potential to produce interpersonal reward situations in the customer's brain. In the second part of the data analysis, this method of reasoning is used because, few, if any, studies have investigated interpersonal reward situations (Elo & Kyngäs, 2008) in this context.

Qualitative content analysis was applied to the 22 interviews transcribed for this study. The empirical data of participant observation made it possible to cross-check the findings (Bell, 2010) of the social domain of certainty, and the emerging topics and concepts that are applied in the first meeting between a salesperson and a customer were compared. However, some concepts may overlap, but these distinctions do not affect the quality of the findings (Elo & Kyngäs, 2008). Furthermore, the interviews and observations were analysed using manifest and latent content (Hsieh & Shannon, 2005). The first refers to analysis for

the appearance of individual words or content in textualised data. The second refers to communication and observation itself and more in-depth analysis of the hidden meaning of text modules or thoughts. Thus, manifest and latent content analysis were considered appropriate for this study because it explored the different perspectives of salespeople and customers on the production of interpersonal reward situations in their interaction.

5.7.6   Triangulation

Triangulation can generally be used in qualitative and quantitative social research, and it is understood to involve the use of different methods, data sources or even researchers within a study to ensure that the findings can be corroborated (Bryman, 2012; Denscombe, 2011; Silverman, 2015). The goal is that the researcher gains a better understanding of the phenomenon under investigation by considering the object under investigation (answering the research questions) from different perspectives (Denscombe, 2011; Flick, 2009). Initially developed by Denzin (1970), the concept of triangulation appeals to the social science research community and has been further developed over the years. There are four basic forms (Denscombe, 2011; Flick, 2009):

- *Data triangulation* is a combination of different data sources which have been collected from different respondents at different times or at different locations.

- *Investigator triangulation* involves several investigators, who check the data against distortions caused by the individual researcher.

- *Theory triangulation* denotes various theoretical positions in relation to the gathered data, such as contrasting a sociological with a psychological perspective of the particular research topic.

- *Methodological triangulation* refers to a concept within a method (within-method) and different methods (between-method). The former method needs similar methods to check the accuracy of the findings. The second one illustrates the use of alternative methods such as combining qualitative and quantitative data.

The use of triangulation increases both the accuracy and authenticity, and focuses on the validation of the findings. Furthermore, triangulation focuses on producing complementary data which increases the completeness of the findings (Denscombe, 2011) in critical realist studies (Seale, 1999), which is the basis of this research study. Finally, Denscombe (2011) states that the reason for using triangulation has to be clear.

This study used data triangulation because data from face-to-face interviews with salespeople, with customers (Section 5.7.2) and participant observation of initial salesperson-customer meetings (Section 5.7.3) is available. Thus, there were three data sources which needed to be synthesised and implemented in the conceptual framework to better understand sales techniques and salesperson-customer interactions.

This study explores the five social domains of experience and synthesises these with empirically defined topics and concepts which address the automatic social cognition system underlying the human reward system. Since this study adopts a critical realist position (Archer et al., 2013) and since there are three data sources available, the use of triangulation seems appropriate because it compares the views of salespeople and customers and complements these views with data from three initial salesperson-customer meetings. Thus, this study collected face-to-face interview and observation data from two different groups (salespeople and customers) and carried out data triangulation, which provides a broader picture of the research questions to be investigated (Denscombe, 2011). In the findings chapter on the social domains of experience (Chapter 7), typical quotes of the salespeople and the customers are tabulated and their views are compared in each of the sections.

5.7.7 Quality of the Data and its Possible Limitations

The credibility of the data in a social science study generally needs to be proven during the research process, and certain quality criteria such as reliability and validity must be observed, irrespective of whether the study is quantitative or qualitative in nature (Denscombe, 2011; Mayring, 2010).

Reliability reflects the extent to which similar results from observing something or interviewing someone can be repeated by another researcher. For validity, a verification of the conclusions drawn in terms of the scientific question and investigation instruments are well-grounded and correspond to the real world (Flick, 2009). However, researchers try to adapt these classic quantitative approaches of reliability and validity in qualitative research as well. It is suggested that qualitative studies should be judged according to slightly different criteria than quantitative studies (Bryman, 2012). Lincoln and Guba (1985) proposed the concepts of trustworthiness and authenticity for assessing a qualitative study. Trustworthiness includes four criteria parallel to a quantitative study: dependability equates to reliability, credibility equates to internal validity, transferability equates to external validity and confirmability equates to objectivity.

Lincoln and Guba (1985) argued that this is necessary to be able to judge a qualitative study as socially real and feasible. LeCompte and Goetz (1982) specified the approach with reliability and validity with the following definitions: external reliability, internal reliability, external validity and internal validity, and defined the terms to facilitate a critical realist perspective in a qualitative study. This view says that reliability and validity in a qualitative study can be used similarly to a quantitative one (Mayring, 2010). These different views are summarised as follows in Table 11, which also highlights how these quality criteria are achieved in this study.

According to LeCompte and Goetz (1982), reliability can be divided into external and internal reliability. External reliability is viewed as the degree to which a measure of a concept produces similar results and the degree to which the findings are repeatable by another researcher.

Table 11: Quality Criteria of Social Science

Quality criterion	Description	Phase of research	How achieved
Reliability (external reliability)	Refers to the extent to which a measure of a concept produces similar results and the degree to which the findings are repeatable. Useful tools are an in-depth study protocol and a related database.	Data collection	- Interview guides - Observation protocol - In-depth study protocol - Database to manage the gathered data
Validity (internal validity)	Refers to the accuracy and precision of the data, and is also called construct validity. Multiple sources of reproducible evidence are recommended.	Data collection	- Interview data from salespeople - Interview data from customers - Observation data from salesperson-customer meetings
Generalisability (external validity)	Refers to the prospect of applying the findings from research to other examples of the phenomenon. The theory is viewed as being appropriate for in-depth studies.	Research design and discussion	- In-depth study of a specific group of people - Findings are generalisable in the B2B sector with complex and customised products and services in Central Europe
Objectivity	Refers to the absence of bias in the research study. It highlights that the claims, methods and findings are impartial and neutral, i.e. the researcher has no influence over them.	Research design and discussion	- Planned the data collection well in advance - Tried to be open-minded and not restricted to particular opinions - Viewed face-to-face interviews as expansion of his experience and knowledge

Source: adapted from Denscombe (2011) and Yin (2009)

The participants in this study from the various B2B companies with complex and customised products and services would also be available to other researchers. However, the experiences of the participants are constantly changing und may vary in a further interview (Bryman, 2012) and result in slightly different responses. Furthermore, an in-depth study protocol and a related database were used to store the data in this study. Hence, by following this formal procedure with an in-depth study protocol and a database, the external reliability can be considered sufficient. Internal reliability is not applicable because the researcher was the only person who conducted the interviews with the study participants.

Validity can also be judged from an external and internal perspective (LeCompte & Goetz, 1982). External validity corresponds to the generalisability of the data (Denscombe, 2011), and it is discussed later in this section. Internal validity is the accuracy and precision of the data and is also called construct validity. Multiple sources of reproducible evidence are

recommended. Within this study, salespeople and customers were interviewed face-to-face and observations of initial meetings between a salesperson and customer were carried out. This data allowed triangulation, which strengthened the internal validity of the data and contributed to the completeness of the findings (Denscombe, 2011; Silverman, 2015).

Generalisability describes the application of the findings from the research to other examples in the context. A relatively small sample is studied intensively and afterwards generalised in context. LeCompte and Goetz (1982) called it external validity; whereas, Lincoln and Guba (1985) called it transferability. Thus, the question is to what extent the findings are transferable to the population rather than to what extent the findings exist in other examples of the context (Denscombe, 2011). In the current in-depth study, insights from social cognitive neuroscience and its application to marketing and salesperson-customer relationship theories were used to discuss the empirical findings which emerged from the interviews and observations carried out with participants from the high-technology B2B sector. Thus, it was possible to reflect on the transferability of the findings to similar salespeople in other contexts than the high-technology B2B sector with complex and customised products and services. With this approach of transferability, the findings of this study can be considered generalisable or externally valid within other contexts as well.

Objectivity relates to whether the claims, methods and findings are impartial and remain uninfluenced by the researcher, i.e. personal interests, particular perspectives or community bias. The researcher's identity, values and beliefs are always part of the research process and the formation and analysis of the data. As Denscombe (2011) states, there are two ways for the researcher to deal with this situation. One way is to distance himself from his normal and everyday beliefs, and the second is to revise the research agenda until his personal experiences and social history are no longer evident in the data. In this study, the researcher took care to maintain his distance from the topic by planning the data collection and analysis well in advance. In addition, the researcher tried to be open-minded and not restrict himself to particular opinions. He viewed the face-to-face interviews as an expansion of his own experience and knowledge in the high-technology B2B sector with complex and customised products and services. Finally, the researcher always considered the influence that his position could have on the data analysis and tried to maintain objectivity whenever possible.

Despite the researcher's efforts to respect the four quality criteria of reliability, validity, generalisability and objectivity, possible limitations must be considered. For instance, the researcher of this study took care to maintain his distance from the topic to be as objective as possible. As mentioned above, this was ensured by planning the data collection and analysis well in advance. However, if researchers are directly involved in the data collection phase, it is difficult to maintain distance from the topic at all times (Flick, 2009). For this reason, the researcher of this study used the content analysis technique (Denscombe, 2011; Mayring, 2010) to analyse the empirical data collected through the face-to-face interviews. In addition, the researcher tried to be open-minded and not restrict himself to particular opinions. He tried to see the face-to-face interviews as an expansion of his own experience and knowledge in the high-technology B2B sector with complex and customised products

and services. Despite the researcher's best efforts, a certain non-verbal bias on the subject existed at times.

In addition to that, the researcher always considered the influence that his position could have on the data analysis and tried to be objective whenever possible. For this reason, it is argued that the methods and findings are impartial and neutral, i.e. the researcher had no influence over them during the analysis and interpretation phases. But the researcher always influences the methodological decisions because he is the one who decides on the research framework and its components (Section 5.3). Finally, the researcher gave his report to five different people during the writing process and regularly sought their opinion. His supervisors numbered among these people. Taking the afore-mentioned into consideration, the study can be viewed as sufficiently objective but with certain possible limitations which must be considered.

Furthermore, the research design and the empirical data collection had a limitation which needs to be addressed. The researcher of this study tried to infer unconscious processes through interviewing and observing. This limitation refers to the two quality criteria of generalisability and objectivity because these were the focus during the research design and discussion phases.

The initial conceptual framework (Section 2.2.4, Figure 7) emerged from the investigation into the researcher's question on how the customer's human reward system could be positively influenced. The human reward system consists of the automatic and controlled social cognition systems and significant neurotransmitters which are circulating while these two systems are active (Carter, 2009). Hence, the question was: how could the salesperson with his cognitive performance positively influence the automatic social cognition system to ensure that interpersonal reward situations result?

The initial conceptual framework shows that the social domains of experience may be used to influence the customer's automatic social cognition system. The social domains of experience investigated within this study are: certainty, cooperation, fairness, autonomy and social status (Section 4.2). In Chapter 4, during the synthesis of the literature review and the conceptualisation of the black box of the customer's mind, it emerged from the social cognitive neuroscience literature that these five social domains of experience have the potential to activate the automatic social cognition system when triggered accordingly. This resulted in the elaborated conceptual framework (Section 4.3.1, Figure 15).

Based on this elaborated conceptual framework, the two interview guides were developed to collect empirical data. Through content analysis and category development (Section 5.7.5), specific topics and concepts emerged (Sections 7.2.1 – 7.2.5), which were assigned to the social domains of experience. This resulted in the finalised conceptual framework (Section 7.3, Figure 22). As mentioned at the beginning of this section, a possible limitation was that the researcher of this study tried to infer unconscious processes through interviewing. There is no unequivocal research evidence that these topics and concepts indeed activate unconscious processes in the customer's brain, as this would require the use of

neuroimaging tools (Section 2.2.1). However, the literature on B2C and social cognitive neuroscience provides strong evidence that topics and concepts which create certainty, cooperation, fairness, autonomy and social status behaviour have the potential to activate unconscious processes in the human brain. The problem that the researcher of this study attempted to infer unconscious processes through interviewing will be addressed once more in the Section 8.6 on the research limitations. In the same section, future research possibilities will also be suggested.

5.8   Research Ethics

Research ethics require the researcher to openly and honestly explain his research procedure within the study (aim, objectives, methods). In addition, he is responsible for maintaining the privacy of all participating parties and preventing deception of any kind (Bell, 2010; Flick, 2009). Within this current study, special attention was paid to the key principles of research ethics throughout the entire research process. The researcher rigorously abided with the below-mentioned research ethics rules during his investigation.

The researcher must ensure that the study participants remain anonymous and that the collected data is treated confidentially. Furthermore, the researcher needs to take care that the participants understand the nature of the research and their involvement, and that they voluntarily consent to being involved (Denscombe, 2011).

Within this study, the researcher anonymised the salespeople and customer and gave them numbers such as '*salesperson x*' or '*customer y*'. During and after the data collection phases, no data was disclosed to any other interview partner. Every participant was briefed at the time they were asked for an interview and their role was explained so they understood the nature of the research. The researcher clearly stated that their data would only be used in this study. All of them gave their verbal agreement before and after the interview, which the researcher tape-recorded. During the observations, his second supervisor was present as a witness.

Denscombe (2011) further states that the researcher must act with professionalism and integrity. This means that the researcher is required to operate within the law, be open and honest, and not to engage in deception during the interactions with participants. In addition to that, the researcher is expected to uphold good standards of science during the research process and to maintain confidentiality and not expose themselves or their co-workers to unacceptable danger when they are pursuing the data.

During this study, the researcher treated all the study participants equally. No one was favoured or disadvantaged. Since the researcher is a lieutenant-colonel in the Swiss Army, he is well aware of the need to be open and honest and not to engage in deception as this may have serious legal consequences. This proves that the researcher did not expose himself or anyone involved in this study to unacceptable danger. The researcher has learned to take

care of his subordinates and fellow personnel in the military. He also does this in his private and business life as well as in all related matters. Several security measures such as password protected filing and duplicate lockability of confidential data were used as well.

As stated by Smith (2003), the above-mentioned principles may include but are not limited to the following recommendations by the APA Science Directorate: each interviewee was asked beforehand if he would like to participate in this study and assured that his answers would remain anonymous, and only be used for this study. It was also pointed out that participants have the right to withdraw at any time once the study commenced. Each interviewee was also informed clearly and honestly about the purpose of the study, the procedures and the expected duration. Hence, deception and misrepresentation in association with the participants were unconditionally avoided. Furthermore, when writing the report, special care was taken to avoid any kind of plagiarism. The present work was written entirely by the researcher himself and by no one else. Special attention was paid to the citations, i.e. that they were set unequivocally and in the right place. Finally, the University of Gloucestershire guidelines were strictly followed. The researcher's Research Design 1 was accepted on March 26th 2013 for the part-time PhD degree in Business and Management.

5.9   Conclusion

The goal of this chapter was to present the research framework (Section 5.3) and to outline how the empirical research questions were investigated and the defined research objectives achieved (Section 1.3). As mentioned in the introduction to this chapter, the research design consists of a philosophical standpoint (Section 5.4), a methodological approach (Section 5.5), a research procedure (Section 5.6) and specific methods (Section 5.7) of data collection, analysis and interpretation arising through various decisions made during the research process (Creswell, 2009).

Since this study adopted a critical realist position and since the focus of this study was to better understand sales techniques and salesperson-customer interactions by involving the human reward system in the explanation of a long-term salesperson-customer relationship, the methodology of this research study is cross-sectional (Section 5.5.1) and exploratory in nature (Section 5.5.2). From this, it followed that the research design (Section 5.6.1) had to be qualitative with category development (Bryman, 2012). Within this qualitative design, an in-depth study procedure (Section 5.6.2) was the most practical option for this study because an in-depth exploration of salesperson-customer relationships needed to be investigated. Hence, the investigatory field of this in-depth study focused on senior executive sales personnel and high-level customers for the interviews and on senior salespeople and senior customers for the observations in the B2B sector in Central Europe.

Prior to the main evidence collection phase, a pilot study for testing the interview guides (Appendices A and B) and the in-depth study protocol was carried out with three

participants from the greater Zurich area. The lessons learnt from the pilot study helped the researcher to adapt the research framework, to make necessary adjustments in terms of the participant selection (Section 5.7.1) and to eliminate the apparent weaknesses in the interview guides. Furthermore, with these first experiences, the specific research questions could be adjusted and set out in more detail. To better reflect the open-ended questions during the face-to-face interviews (Section 5.7.2), the 22 (18 + 4) participants were given the opportunity to answer closed-ended questions once the open-ended questions had been answered.

Data collection consisted of various phases in which sales personnel and customers were interviewed and observed (Sections 5.7.2 and 5.7.3). During the 14-month data collection phase, the interview questions, the conceptual framework and the research design were often iteratively adjusted until a research framework was available to generate data and evidence to successfully discuss and answer the research objectives and research questions. The interview data was recorded and transcribed (Section 5.7.4). Qualitative content analysis (Section 5.7.5) was chosen as the data analysis strategy (Mayring, 2010) with the subsequent triangulation of data from senior executive salespeople and high-level customers (Section 5.7.6). Finally, the quality of the data including possible limitations (Section 5.7.7) was verified in accordance with certain quality criteria, such as reliability, validity, generalisability and objectivity (Denscombe, 2011; Yin, 2009), and ethical guidelines were followed. The next chapter will set the context and describe the characteristics of a salesperson-customer relationship.

6 SETTING THE CONTEXT AND DESCRIBING CHARACTERISTICS OF THE SALESPEOPLE AND CUSTOMERS WITHIN THIS CONTEXT

6.1   Introduction

Chapter 6 will define the context in which the empirical data was collected and interpret the different responses of the participating salespeople and customers. As discussed in detail in Section 5.7.1, the sample selection consisted of 18 senior executive salespeople and four high-level customers working in companies with complex and customised products and services. The 18 seller and the four buyer companies are active in the high-technology B2B sector in Central Europe. A senior executive salesperson from each seller company and a high-level customer from each buyer company were interviewed face-to-face (Section 5.7.2).

Chapter 6 is divided into three sections. The first section will present a short introduction (Section 6.1). Then the characteristics of the participating companies, salespeople and customers will be outlined (Section 6.2). Finally, conclusions will be drawn based on the context in which the empirical data was gathered for this study (Section 6.3). The descriptions of the senior executive salespeople and the high-level customers will be discussed in relation to the characteristics of a long-term salesperson-customer relationship in the high-technology B2B sector, which was discussed in theoretical terms in Section 3.4.

6.2   Characteristics of the Participating Companies, Salespeople and Customers

Sections 6.2.1 and 6.2.2 provide an extract from the description of the sample of the participating companies, senior executive salespeople and high-level customers chosen for this study. A full description of the companies and the participants can be found in Appendices E and F. Section 6.2.3 will outline a collection of responses from the interviewed senior executive salespeople and high-level customers. This collection includes differences raised in the interviews which offer additional exploration of the automatic social cognition system underlying the human reward system within the finalised conceptual framework. Section 6.2.4 will describe the early stage of a salesperson-customer relationship and the beginning of the co-creation process.

In the current study, purposive sampling (Section 5.7.1) was carried out where the target population of the investigatory field consists of senior executive sales personnel and high-level customers from high-technology B2B companies located in Eastern Switzerland, Liechtenstein, western Austria and southern Germany, an area which is referred to as Central Europe in this study. These high-technology companies develop, manufacture and distribute complex and customised products and services such as machines, systems, components or infrastructures. These customer-specific products and services are sold by regional sales teams or distribution companies with regional responsibilities. The sales personnel must provide high-level consulting and support services, which means they spend a considerable amount of time with their customers (Sharma et al., 2008). This setting was chosen because the participants have an in-depth knowledge of how a long-term

salesperson-customer relationship is developed and maintained, and because they have the managerial insights to provide the data which is needed to achieve the aim and objectives of this study. Furthermore, in this setting, sales personnel need to be extremely trustworthy and have a high level of commitment and expertise (Winkelmann, 2008).

An excerpt from the demographic description of the interviewed participants involved in the data collection stage was presented in Table 10, in Section 5.7.1. The reason for providing a description of the companies and the participants is twofold. Firstly, it is interesting to see what kind of products these companies develop, produce and distribute, and in which segments (industries) they can be classified. This results in specific characteristics for these companies which are essential for understanding the context of the sale of complex and customised products and services (Section 6.2.1).

Secondly, this classification of companies in industrial segments affects the personal selling style of salespeople. Therefore, it is important to classify the predominant personal selling style of each salesperson based on the four prototypes which include the unconscious assessment of the limbic system (Section 6.2.2). From this discussion, key properties became apparent which will set the context for the findings presented in Chapter 7 and add to the finalised conceptual framework in Chapter 8.

Thirdly, during the analysis of the data, an interesting phenomenon was discovered. In Section 6.2.3, quotes from the interviews with the salespeople are presented which suggest that not every salesperson perceives the customer's unconscious mind in the same way within their interactions. These differences were listed in a table and a connection could be made to one of the social domains of experience underlying the human reward system for each of these differences.

Finally, the early stage of a salesperson-customer relationship and the beginning of the co-creation process will be presented in Section 6.2.4. The observations of the senior executive salespeople and the high-level customers clearly show that the early stage of a relationship is one of the most uncertain phases in the whole sales cycle and the development of a salesperson-customer relationship. Therefore, this section will establish what is clear or unclear within such a relationship and provide a possible explanation of such situations in relation to the social domain of certainty (Sections 4.2.1 and 7.2.1).

6.2.1   Companies with Complex and Customised Products and Services

Table 11 below presents a summary of the 22 companies based in Central Europe (Eastern Switzerland, Liechtenstein, Western Austria and Southern Germany) in which the interviewed salespeople and customers were working at the time of investigation. Furthermore, a classification of the salespeople's companies is made based on NACE codes (English: Statistical classification of economic activities in the European Community; French: Nomenclature statistique des activités économiques dans la Communauté européenne) (Eurostat, dated 03.05.2016). NACE revision 2 codes for industries and services can be found in Appendices G and H. Eurostat (European Union (EU) management unit for creating

European official statistics), which is headquartered in Luxembourg, states that "*in order to compile statistics on high-technology economic activities, it uses an aggregation of the manufacturing industry according to technological intensity and based on NACE Rev. 2 level for compiling aggregates related to high-technology, medium high-technology, medium low-technology and low-technology.*" For this study, it was necessary to analyse the companies based on these specific criteria to ensure that the findings of this study are valid in this specific industrial environment.

The seller companies participating in this study can be classified as providers of high-technology and medium-high technology products, and high-technology knowledge-intensive services. This business environment is known for the development, the production and the distribution of complex and customised products and services, and for specific characteristics which influence the personal selling style of the salesperson (Madhavaram & Appan, 2010; Sharma et al., 2008). The buyer companies are listed as well, but are not included with the NACE code. The reason why the buyer companies are included is to see where the interviewed customers were working at the time of data collection. The companies in which the interviewed salespeople were employed at the time of investigation produce a range of high-technology and medium-high technology products, and offer high-technology knowledge-intensive services (Table 12).

Table 12: Classification of the Demographic Analysis of the Buyer and Seller Companies

Company	Products	Segments (Industries)	NACE code
Company S1	- Preclinical magnetic resonance imaging spectrometers	- Academic, pharmaceutical, industrial, clinical and applied markets	20, 21, 72
Company S2	- Industrial control and automation technology systems	- All types of industrial markets	27
Company S3	- Laser medical equipment	- All types of industrial markets	21, 26
Company S4	- Mass spectrometry systems	- Academic, pharmaceutical, industrial and clinical markets	21, 72
Company S5	- Sensor technology and control systems	- Industrial markets of semiconductor and vacuum-coating industries	21, 27
Company S6	- Defence and homeland security systems and solutions	- Industrial and defence markets	25.4, 26, 30.3
Company S7	- Power supply technology	- Power supply and industrial markets	26, 27
Company S8	- Magnetic resonance spectroscopy systems	- Academic, pharmaceutical, industrial, clinical and applied markets	20, 21, 72
Company S9	- Implementation and system operation technologies	- Industrial goods and plant construction sectors	28, 62
Company S10	- Implementation and operation of high-tech systems	- Plant engineering and machine industry sectors	28
Company S11	- Machinery and equipment for ecological systems	- Industrial goods sector and construction industry	27, 72
Company S12	- Machinery and equipment for ecological systems	- Industrial goods sector and construction industry	27
Company S13	- Sub-assembly and assembly of high-tech systems	- Industrial goods and service sectors	27, 62
Company S14	- Ophthalmology and surgical	- Academic, pharmaceutical,	26, 32.5, 72

	equipment technologies	industrial, clinical and applied markets	
Company S15	- Precision engineering and high-tech products	- Industrial goods and military sectors	27, 72
Company S16	- Drive and control technologies	- Industrial goods sector	60, 62, 63
Company S17	- Precision components and machinery	- Automotive, aerospace, medical and plant engineering sectors	30, 32.5
Company S18	- Radar systems and high-technology measurement systems	- Road traffic, transport and military industries	28, 72
Company C1	- Systems and solutions to process high-quality products	- Fields of basic and quality steel, stainless steel, nonferrous metals and special materials	intentionally left blank
Company C2	- Sustainable products and complex human-environment systems	- Fields of environmental technology, solar technology and energy balance	intentionally left blank
Company C3	- Products and solutions to meet the essential requirements of the markets, such as resource and energy conservation, and miniaturisation	- Fields of modern technologies, efficient processes, implementation and transfer technologies	intentionally left blank
Company C4	- Systems and technologies for processing grain for flour and feeding	- Fields of grain for flour and feeding worldwide	intentionally left blank

Source: Author

Five companies are present in the high-technology field in the manufacturing of basic pharmaceutical products and pharmaceutical preparations (NACE code 21), four in the manufacturing of computer, electronic and optical products (NACE code 26) and the manufacturing of air and spacecraft and related machinery (NACE code 30.3). Two companies are active in the chemical and chemical products manufacturing field (NACE code 20), one in the manufacturing of weapons and ammunition (NACE code 25.4), seven in the manufacturing of electrical equipment (NACE code 27), three in the manufacturing of machinery and equipment (NACE code 28), two in manufacturing of other transport equipment (NACE code 30) and two in the manufacturing of medical and dental instruments and supplies (NACE code 32.5). One company operates in the programming and broadcasting field (NACE code 60), two are active in computer programming, consultancy and related activities (NACE code 62) and in information service activities (NACE code 63), which represents the field of high-technology knowledge-intensive services. Each of the aforementioned companies is described further in Appendix E.

This classification of the demographic analysis of the buyer and seller companies will yield the specific characteristics of this industry. In the following passages, three typical quotes from the interview data will be presented. To summarise, all 18 companies have complex and customised products and services in their portfolio which are consultation-intensive from the time they are defined together with the customer:

> *"I regularly try to understand which phase of a project the customer is in and what could be important for him in this phase. I ask myself what processes the customer*

is going through at that time. I always try to tailor my sales pitch to the customer's needs and to help him solve his problems in the best possible way." (Salesperson 2)

The customer support does not end after the system has been defined and procured by the customer. Ideally, the support continues. Proactive support from the salesperson can certainly lead to a competitive advantage for the seller company and the salesperson:

"A major issue is always the maintenance and service. Many systems are no longer operational because they were badly serviced or even received no service at all. Or, in some cases, there is no available money to perform the service. When this happens, we as a company are open and customer-focused. We often maintain and repair systems at our own expense. For that reason, we have a reputation for offering excellent customer service. Word of our work got around relatively quickly, which brought us new business. Our primary goal is to ensure that the equipment we supply always operates properly. In many cases, non-insiders don't understand this. But if we don't do this, it may well be that these customers turn to our competition for their next purchase." (Salesperson 8)

In taking this view that the customer support should not end after the system has been purchased, companies need to employ salespeople and sales managers who are highly educated because of the importance of providing continuous support to the customer (Zakrzewska-Bielawska, 2010). This can be seen in the education level of the senior executive salespeople participating in this study (Section 6.2.2 and Appendix F).

Furthermore, all the companies participating in this study are committed to training their salespeople in-house and the customers after a purchase has been made. Evidence of this can be found in the description of the companies in Appendix E. Training is needed to understand how the system operates and how the best results can be achieved from it. Furthermore, all the companies are committed to offering extensive maintenance and service throughout the whole life cycle of the systems:

"In general, you cannot buy any systems from us for under a million dollars. In many cases, this is a once-in-a-lifetime purchase or at least, [the customers] expect that such a system will run for 15–20 years. It is very likely that there won't be too many opportunities to significantly retrofit the system during this period. [As a salesperson], I must provide a certain guarantee to [the customer] that the system will serve its purpose for many years. During this time, our tasks are simple: we need to ensure that the system meets the [company's] needs, runs reliably, can be supplied with spare parts when there are defects, can be upgraded or retrofitted, and that the customer knows how to run the system." (Salesperson 1)

Complex and customised products and services are consultation-intensive for salespeople when they are sold to potential customers. Personal selling requires highly educated salespeople with in-depth communication skills and a close relationship with the customers so that the customer from the buyer company is satisfied with the product or service (Zakrzewska-Bielawska, 2010). These factors generate a business environment with very

specific characteristics, which in turn affects the seller company and has implications for their sales personnel (Sharma et al., 2008).

6.2.2 Salespeople and Customers in a Consultancy-Intensive Business Environment

This section will present a summary of the 18 face-to-face interviewed salespeople who worked in the companies introduced in Section 6.2.1. The participant sample breakdown including data collection phase (Section 5.6.2, Table 8) and the demographic analysis of the interviewees (Section 5.7.1, Table 10) were extracted from the information in this section.

Appendix F contains more information on the 18 salespeople who participated in this study: person-specific characteristics such as age, education, experience in the field of selling complex and customised products and services, and personal selling style. The personal selling style of each of the salespeople is underpinned with an appropriate quote from each of them to provide insights into context-sensitive factors. Each salesperson has a predominant selling style, but successful salespeople can utilise more than one selling style, depending on the sales situation (Häusel, 2015), to create value during salesperson-customer interactions (Alamäki & Kaski, 2015; Haas et al., 2012). Context-sensitive factors are specific, not directly observable personality traits which help to describe the salesperson's cognitive performance (Section 2.2.5). It is common knowledge that customers buy the salesperson's conveyed emotional message rather than the complex product itself (Ćosić, 2016). An incorrect or negative message or offer does not win over the customer (Kenning & Plassmann, 2005) and produce interpersonal reward situations in his brain. Instead it produces threatening situations which can also be related to distrust (Borum, 2010). The customer then withdraws and refuses to buy the product or service. The following quote from one of the customers involved in the interviews confirms this:

> *"For me, it is always the salesperson's personality which is decisive in the first phase. If a [salesperson] speaks and acts indecisively, and if I don't have confidence in him, then I don't have confidence in the products he's selling. Those who are sweating and trembling don't have a chance of selling me anything." (Customer 4).*

In the B2B sector, with its complex and customised products and services, business is still done between people rather than between companies. The interpersonal relationship between a salesperson and his customer is the factor which decides whether such relationships are successful, or not (Boles, Brashear, et al., 2000; Boles, Johnson, et al., 2000; Ingram et al., 2008; Morgan & Hunt, 1994):

> *"That's just the way it is. Business is carried out based on the relationship between the salesperson and the customer. Despite the technological progress with advanced communication systems, human beings are still more important than we think. Good products, transparent prices and high quality are prerequisites. The salesperson as a human being is the crucial factor… On the basis of the salesperson's personality, in many cases after 10 minutes, it is clear whether business can be done, or not. A*

good salesperson promises 10% revenue growth. The well-established suppliers know this." (Customer 4)

Long-lasting relationships between the seller and buyer company must exist to allow the salesperson to sell complex and customised products and services. As discussed in the literature review (Section 3.3.1), the salesperson is the most important interface between the seller and the buyer company (Weber et al., 2005). *Salesperson 18* confirms this and his view is in line with the above statement from *Customer 4*:

> *"The salesperson must be able to create a personal connection with the customer. It is obvious that technical expertise is indispensable for a salesperson. However, in the industrial goods sector, the buyers know the products and they can judge whether a product is good or not. They also have a high level of expertise… Frequently, personal aspects are involved, which means [the customer] believes that we as a company can deliver on time and adhere to the agreed-upon price frame… I have such a good relationship [with some customers] that they buy my systems even if they are still in the development phase. The difference at the end is the personal relationship [between the customer and me]. Somehow, the systems can be developed, but the drive to make this happen is a lot stronger if we have already found a customer. The technology itself could always be judged very well by the buyer because he has a very high level of expertise. The more uncertain the development of the system is, the more clearly the final contract is laid out. The [final product] is always clarified in a legal framework contract." (Salesperson 18)*

As the above-mentioned quote illustrates, the salesperson performs one of the most important tasks in the personal selling of complex and customised products and services. He is responsible for establishing, developing and maintaining the relationship with the customer (Morgan & Hunt, 1994; Palmatier, 2008). In addition to that, he is also responsible for revenue generation (Dowling, 2002). To do so, a salesperson must behave in such a way that develops customer trust, relationship commitment and customer satisfaction (Section 3.3.1) so that a high-quality relationship results and the customer in question makes a purchase (Avila et al., 2006). Until a deal with a consulting-intensive product or service is finalised, the salesperson is in intensive contact with the customer. This means he needs to have the abilities to develop a long-term relationship with the customer. This is reflected in *Salesperson 14's* statement:

> *"Selling is in fact an intensified form of communication, such as in marketing, which aims to generate a mutual consensus. With respect to the sale, this means the customer buys from me because we have the same opinion about the offered and requested products and services." (Salesperson 14)*

Salesperson 14 seems to be saying that selling is an intensified form of communication which aims to generate a mutual consensus so that salespeople's products and services can be sold, respectively purchased by customers. This confirms Petermann (2013)'s view that the

decisive factor is how a salesperson behaves verbally and non-verbally in front of a customer. This is also indicated by *Customer 4* in the above-mentioned quote.

The interviews revealed that the way the salesperson behaves in front of the customer depends very much on his personal selling style. This is consistent with the literature, which says that the personal selling style of the salesperson is important to create value during salesperson-customer interactions (Alamäki & Kaski, 2015; Haas et al., 2012). As highlighted in Section 3.4.2, there are four recognised basic types which include the unconscious assessment of the limbic system: the correct, the enthusiastic, the hard-seller, and the empathic salesperson. However, as mentioned in Section 3.4.2.1, successful salespeople are able to vary their selling style depending on the situation they are in while talking to the customer (Häusel, 2015).

During the face-to-face interviews, the researcher realised that the study participants all had a predominant personal selling style. In Appendix F, which provides more information on each of the salespeople, there is a quote given from the interview which underpins the determination of the salesperson's predominant selling style. The characteristics of the interviewed sales personnel, along with their education, business experience and personal selling style, are summarised in Table 13 below.

Table 13: Characteristics of the Interviewed Salespeople

Interviewee	Education	Experience	Personal selling style
Salesperson 1	Higher education and postgraduate degree in business administration	> 27 years	knowledgeable
Salesperson 2	Higher education and postgraduate degree in business administration	> 8 years	collaborative
Salesperson 3	Higher education and postgraduate degree in business administration	> 13 years	knowledgeable
Salesperson 4	Vocational school and subsequent diploma study in sales	> 15 years	knowledgeable
Salesperson 5	Higher education and postgraduate degree in business administration	> 24 years	collaborative
Salesperson 6	Higher education and postgraduate degree in business administration	> 8 years	goal-oriented
Salesperson 7	Vocational school	> 25 years	sensitive
Salesperson 8	Higher education and postgraduate degree in business administration	> 38 years	collaborative
Salesperson 9	Higher education and postgraduate degree in business administration	> 23 years	collaborative
Salesperson 10	Higher education	> 7 years	collaborative
Salesperson 11	Vocational school and postgraduate degree in business administration	> 19 years	collaborative
Salesperson 12	Higher education and	> 20 years	knowledgeable

	postgraduate degree in business administration		
Salesperson 13	Higher education and postgraduate degree in business administration	> 10 years	goal-oriented
Salesperson 14	Higher education and postgraduate degree in business administration	> 20 years	knowledgeable
Salesperson 15	Vocational school	> 25 years	sensitive
Salesperson 16	Higher education and after diploma study in business administration	> 23 years	goal-oriented
Salesperson 17	Higher education and postgraduate degree in business administration	> 18 years	goal-oriented
Salesperson 18	Higher education and postgraduate degree in business administration	> 16 years	collaborative

Source: Author

Four of the salespeople presented above have completed vocational schooling. Two of them have finished postgraduate study in sales. Fourteen have undertaken tertiary education in the form of bachelor or master's study, and thirteen of the fourteen salespeople have completed a postgraduate degree in business management. Among the interviewed salespeople, three of them have fewer than ten years' experience in selling complex and customised products and services. Six have 10–20 years' experience, eight 20–30 years' and one more than 30 years' experience in the sales business. Five out of 18 have a 'knowledgeable' personal selling style, seven a 'collaborative' selling style, four a 'goal-oriented' selling style and two a 'sensitive' selling style.

After describing the 18 salespeople, the interview data shows that the participating senior executive salespeople have an average of 19 years' experience in selling complex and customised products and services, a tertiary education and a postgraduate qualification in business administration. This is partly consistent with the findings from Blocker et al. (2012), who suggested that customer value can only be achieved if the salesperson has in-depth knowledge of the customer's technologies and its processes. This means the salesperson must have already been in the business for a while and have adequate experience and a good education to gain in-depth knowledge. Blocker et al. (2012)'s study did not consider the salesperson's tertiary education and a possible postgraduate qualification in business administration. Therefore, the current study supports their argument and adds further evidence that senior executive salespeople in the high-technology B2B sector are frequently those who have almost 20 years' business experience in combination with a postgraduate qualification in business administration. However, after describing the education and the experience of the salespeople, no definite link could be established with the salespeople's personal selling styles; instead, the salesperson's personality and character are decisive in the development and maintenance of a long-term salesperson-customer relationship.

As discussed in the literature review (Section 3.4.2), experienced salespeople are intelligent and have a lot of energy, which allows them to provide their customers with outstanding consultancy services (Section 3.3.3.1). Furthermore, they are always interested in the customer's business as well as in his private life (Section 3.3.3.2). They act with integrity and are conscientious in their dealings (Section 3.3.3.3). The following quote underpins this:

> *"I always want a personal conversation [with the customer] on the phone or face-to-face. In doing so, I ask the customer directly whether he is satisfied with our performance. E-mail is too complicated; it is important to get an idea of what's going on with the customer by phone or face-to-face. Normally, [the customers] are not always completely open in the conference room. During a dinner, additional commercial as well as private issues are often discussed in greater depth. I have sacrificed many evenings and weekends for our customers and have taken part in special events. My basic philosophy is that I am also willing to give the customer the same as what I get from him." (Salesperson 17)*

In addition to that, highly successful salespeople are extroverts and they provide information about themselves even when they are asked personal questions. This was also reflected during the interviews. Most of the participating salespeople talked for more than 45 minutes during the interview. They answered all the researchers' questions, even though they were given the option not to do so.

Finally, the interview data shows that the participating senior executive salespeople have a predominant selling style and they are knowledgeable, collaborative, goal-oriented and/or sensitive (Häusel, 2015; Ingram et al., 2008). The participating salespeople are aware that they need to adapt to their customer's situation and adjust their personal selling style to the sales situation in question. This is reflected in *Salesperson 6's* statement:

> *"I always use the Buyer-Center Analysis: what are the [customer's] business goals, what are the [his] personal goals, and how does the customer feel about the solution? I have relatively few long-term customers who I manage in long-term projects, but they are profitable. It is definitely worth learning as much as possible about the customer and being as transparent as possible with information. This results in a close friendship with existing as well as potential customers. After a customer meeting, I always reflect on what has happened and wonder whether I am still doing my job well, or whether I have to adapt my [selling] behaviour to the customer." (Salesperson 6)*

In a consultancy-intensive business environment, such as the personal selling of complex and customised products and services, it appears that human interaction is the factor which determines whether the customer is going to purchase or to repurchase the product or service.

Furthermore, the afore-mentioned explanations and quotes in this section show that the initial phase of a salesperson-customer relationship is one of the most important phases in the sale of complex and customised products and services. This initial phase of a

salesperson-customer relationship will be further investigated based on structured participant observation data in Section 6.2.4. This initial phase only contains unknown dimensions: the business is unknown, the customer is unknown and the target, which is to be defined together with the customer, is also unknown. These are the characteristics of personal selling in the high-technology B2B business sector with complex and customised products and services, where the participants in this study work.

In line with the literature, all uncertainties, such as technological uncertainty, market uncertainty, competitive volatility, unit one costs, tradability problems and knowledge spillovers (Mohr et al., 2010; Sharma et al., 2008) place salespeople in this environment in challenging situations. Depending on how a salesperson handles these situations, he has the cognitive power to address the automatic as well as the controlled human social cognition system (Bargh, 1999; Chaiken & Trope, 1999; Lieberman, 2007). Therefore, it is important that both automatic and controlled social cognition processes are used to improve understanding of personal selling because automatic processes play a major role in improving our understanding of how customers make purchase decisions (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). These processes, especially the automatic social cognition system, have not been considered to date in the development and maintenance of long-term salesperson-customer relationships. Neuroscience and its latest findings can explain the human reward system, which consists of automatic and controlled social cognition processes (Hsu, 2016; O'Connell et al., 2011; Randolph et al., 2013). Thus, this study is attempting to create a window into the black box of the customer's mind and present a finalised conceptual framework which will provide researchers and practitioners with a better understanding of the process of building and maintaining a long-term salesperson-customer relationship in the high-technology B2B sector with complex and customised products and services.

6.2.3 Intuitively Evaluated Selling Situations in a Salesperson-Customer Relationship and their Interpretations

As mentioned in Section 6.2.2, human interactions and relationship-building are decisive factors in the sale of complex and customised products and services. This means that the salesperson is the most important interface between the seller and buyer companies. In technical terms, this interface function is referred to as a boundary spanner function between the buyer and seller company (Bradford et al., 2009; Swan et al., 1999). This function defines the role of the salesperson (Section 3.4.2.1), who has, according to the face-to-face interviews, two main tasks: (1) to understand the buyer party with all his different aspects and processes, and (2) to demonstrate the technical skills and competences required to successfully sell the products and services of the seller party. Therefore, customers want to deal with salespeople who can help them to view their problem in factual terms and give them emotional support to move toward a purchase decision. Broadly speaking, customers want salespeople who are able to create value for them (Alamäki & Kaski, 2015; Haas et al., 2012) (Section 3.4.2). As it became evident from the interviews conducted as part of this study, salespeople are well aware that the customer's emotional state plays a major role

during the course of a sales cycle and in finally concluding a sales deal. In the neuroscientific literature, this emotional state is influenced by several human brain processes which function unconsciously; this means automatically and without the awareness of the mind (Section 2.2.2, Table 2). Automatic processes are spontaneous and unintentional (Wegner & Bargh, 1998), and they play a major role in helping researchers understand how customers make decisions (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). This is why it is still very challenging for the salesperson to understand the customer's unconscious mind.

During the 22 face-to-face interviews with the senior executive salespeople and the high-level customers, there were certain situations which gave the impression that salespeople do not try to understand the customer's unconscious mind, but instead attempt to judge emotional situations intuitively and without any awareness of the conscious mind. This behaviour was most evident when the participants talked about the customer's emotional state in specific customer-facing situations. During the analysis of the transcribed interview data, phrases and expressions were collected and further interpreted with the social cognitive neuroscience literature in general and with the social domains of experience in specific terms. Statements such as:

> "it is going on in the unconscious mind" (Salesperson 2), "the customer must get the feeling" (Salesperson 3), "I consciously try" (Salesperson 5) or, "simply intuitive elements" (Salesperson 16),

to mention just a few, were found. Since the researcher is aware of the research field of social cognitive neuroscience and its terms, he noticed that these statements could be interpreted and discussed with the theory of neuroscience and with the defined social domains of experience (Sections 4.2.1 – 4.2.5). It seems that there is still enormous potential in these still intuitively evaluated selling situations for the salesperson to fully understand how a customer makes his buying decisions and what they need to when they communicate with the customer. This again leads to the argument that neuroscience has the potential to provide salespeople with a complementary perspective to understand the customer's purchase decisions, thereby improving their own sales techniques in the sales process (Randolph et al., 2013). The following quotes from the participants of this study provide examples of the above-mentioned intuitively evaluated selling situations, which are often unexplainable for salespeople, but may be clarified with the latest neuroscientific findings on the human reward system.

For example, *Salesperson 2* noted that the process to build up a personal relationship with the customer is largely unconscious:

> "A personal relationship with a customer has a beginning at a certain time and point. This beginning starts mostly with common business or private interests. From my experience, I have learned when I just act as I would usually and let things proceed as they should, then my discussion partner is open to sharing his stories. In most cases, this is the starting point of a personal relationship [with the customer].

This point cannot be rationally defined, rather it is intuitive, i.e. occurs in the unconscious mind." (Salesperson 2)

Theory suggests that the salesperson should always allow the customer the perception of control and of having choices (Ryan & Deci, 2006). However, in practice, most of the salespeople try to control the customer's decision so that he chooses the salesperson's favoured choice. In fact, this kind of control will be unconsciously perceived by the customer's automatic social cognition system, which may lead to a conscious sense of dissatisfaction (Carter, 2009; Liu & Leach, 2001). The following quotation shows how *Salesperson 3* tries to control the customer in his decision-making process:

"In the background, I certainly try to ensure that [the customer] decides what I think is best. The best way is if the customer is convinced that it was his idea. I am sure it would not work if I tried to impose something on him. He must get the feeling that the decision to buy is his alone. This is very important." (Salesperson 3)

Salespeople do not try to consciously put themselves in their customer's situation or to empathise with them in this regard:

"I'm not really aware of it. But I try, of course, to create a positive environment. I do not consciously try to find out what kind of mood the customer is in, but I consciously try to build up a good atmosphere so that the atmosphere is relaxed. I'm never rude. Even if the situation is tense, I remain friendly. You must always assume that other parties are involved in building a relationship. For this reason, you cannot afford to be rude. Even if it is a mood which makes everyone uncomfortable." (Salesperson 5)

When communicating with their customers, the salespeople not only try to listen but also to observe and draw conclusions on what the customer may decide to do:

"I not only try to listen but also to observe [the reactions] of my customers. This is actually my philosophy in life. I always try this when communicating with other people. What helps me is that I have had many experiences in life, so I am able to put myself in the customer's shoes. However, I often do it unconsciously." (Salesperson 6)

Salespeople in the field of complex and customised products and services tend to be open to offering the customer different solutions. If the salesperson has found an optimal solution to the customer's problem, then he openly communicates this to him. If the customer has a solution which the salesperson is convinced is not the right one, he also openly communicates this to the customer:

"I try to understand the customer's situation, where he is in the process and what his goal is. If I feel that I know it, I try to get feedback from him. If I then understand where he is coming from, I do my best to find a solution to his problem. Generosity, goodwill, or whatever else, can also lead to me having to tell the customer that he is mistaken about a matter. My credo in this regard is that I would rather tell him if

something goes wrong. I certainly don't give him the feeling that something works if it is really not working. Honesty is essential!" (Salesperson 7)

However, salespeople have different ways of discerning the customer's mood. Some of them never ask their customers directly how they are feeling, and they never try to ascertain the customer's mood:

"I definitely don't ask what kind of mood the customer is in. It is too difficult to find this out. I always feel that I am welcome when I enter the customer's office. That always puts me in a good mood. Perhaps, our company's reputation has something to do with this. But, I never have a strategy to find out how the customer is feeling. It's far more intuitive. Of course, I always look at any information about the customer's prehistory beforehand." (Salesperson 8)

And some of the salespeople always try to find out the mood of their customers, even though it is not exactly clear how the salespeople go about doing this:

"I always make a real effort to find out the customer's mood. I guide myself to consciously perceive how the customer is feeling, by proposing different approaches to achieve his goal and thereby to carefully listen to his verbal reactions and to observe his nonverbal reactions. This probably has to do with the fact that I am an empathetic person." (Salesperson 10)

Customers in turn agree that some of the salespeople do not even try to put themselves in their situation or to empathise with them as the following quote shows:

"They don't even try. They are not capable of doing it. Once things get emotionally difficult, such as in the case of a death, they are not capable of dealing with the answer. They are then blocked. But, actually they would have been successful then. They have a discussion partner who is open to them, but 80–90% then change the subject." (Customer 4)

Salespeople in such critical situations distance themselves and react relatively insensitively. They keep to the technical facts instead of discussing such emotional situations.

"This is difficult and I just wonder whether I have experienced it. However, I have [actually] experienced a lot [of emotional situations]. But, in principle, I try to ignore such situations and instead stick to the facts." (Salesperson 11)

"If I empathised with the customer, this would mean that I had already experienced this situation. I am really able to do this, but I do not want to do it consciously. I focus mainly on facts about the project and the system itself." (Salesperson 12)

In general, salespeople try to empathise with the customer, but remain more focused on the facts in the sales cycle. They are indeed trying to generate future prospects which correspond to positive customer experiences, but more unconsciously than consciously:

"I certainly try to produce a positive perception of the future and the results, but most likely unconsciously. I explain and describe our complex internal processes and also the technology we use [to develop and manufacture the system]. I don't generate future prospects directly, but I explain all the facts throughout the entire project cycle. Out of these facts, the customer realises what he can and can't do with us in the near future. This presentation [of the project cycle] has helped me greatly to finalise deals until now." (Salesperson 11)

The generation of future prospects which take into account the positive experiences of the customer is also connected with reducing uncertainties because the human brain constantly tries to understand the meaning of the world and thereby to control the body and mind's future actions (Carter, 2009; Huettel et al., 2005). Salesperson 16 believes that this process is often not necessarily based on hard facts but rather on soft facts such as intuition. This is in line with the literature which suggests that customer retention is based on hard as well as on soft factors (Winkelmann, 2008) (Section 3.3). Both hard and soft factors are part of the definition of the salesperson's cognitive performance (Section 2.2.5).

"I don't necessarily reduce uncertainties based on facts. It can also be due to impressions or simply intuitive elements, or rather emotional situations. If I go to a customer, his situation will certainly have changed between the appointment and now. This may be included in such discussions with the customer." (Salesperson 16)

Uncertainties also prevail in regard to social status, which is also often realised unconsciously (Section 4.2.5). Social status was not widely recognised by the interview participants as such. They view the social domain of social status more in terms of having a sufficient level of business experience and in-depth technical knowledge. A consequence of this is that high-ranking salespeople can participate and interact actively in sales conversations with the customer. Fiske (1992) already discovered this several decades ago. Key individuals such as senior executive salespeople with a sound level of experience are seen by the customer as having more technical competence and more personal characteristics. This fact is especially important under situations of higher perceived uncertainty because the salesperson is then seen as having more decision-making authority (Spekman, 1979; Tushman & Scanlan, 1981). However, the full effects that social status can have in the customer's mind seemed to be relatively unknown by the participants in this study. The following quote highlights how such a situation may unconsciously proceed:

"There are moments when someone enters the room and things get very quiet. He is obviously the boss. He doesn't need to say it; you just notice it unconsciously. There are institutions where the title and role are important. But I do not want to make my counterpart nervous, so I rarely mention [my position]. It is apparent from the situation and my knowledge about our products." (Salesperson 18)

As mentioned above, these quotes suggest that there are still intuitively evaluated selling situations for senior executive sales personnel with a sound level of experience in sales of complex and customised products and services. They cannot or can only partly be answered

with the existing relationship marketing knowledge. However, if the latest findings on the human reward system and how interpersonal reward situations in the customer's brain can be produced were incorporated into the explanation, intuitively evaluated selling situations may suddenly become clearer. In Table 14 below, intuitively evaluated selling situations are listed and interpreted with the respective social domain of experience.

Table 14: Intuitively Evaluated Selling Situations in a Salesperson-Customer Relationship

Intuitive evaluated selling situations	Unconscious perception	Social domain of experience
At the beginning of a sales cycle with complex and customised products and services, there are many uncertainties such as technological uncertainty, market uncertainty and unit one costs. As it became apparent from the social cognitive neuroscience literature (Section 4.2.1), if potential doubts are reduced and future prospects are generated, the human reward system seems to be positively stimulated and a potential interpersonal reward situation may be produced. Therefore, the salesperson's mission is to reduce these uncertainties and to generate future prospects which are in line with the positive experiences of the customer. Hence, the customer must quickly feel comfortable and well looked after by the salesperson within the relationship. - The interview data seems to suggest that uncertainties are not just reduced by hard facts. There are also intuitive elements which help this happen. It seems the salesperson does not have sufficient understanding of how he can consciously reduce existing uncertainties on the customer's side and of what happens in the customer's brain during these tasks. Therefore, this raises the question of how the salesperson can capture and assess these elements rationally instead of only intuitively. - The interview data seems to suggest that the salespeople try to generate future prospects which correspond to the positive experiences of the customer, but that they do this unconsciously rather than overtly. This means that salespeople are not aware of how to consciously generate future prospects which correspond to the positive experiences of the customer.	- Reduce potential doubts - Generate future prospects	Certainty (Sections 4.2.1 and 7.2.1)
Complex and customised products and services are consultancy-intensive for the salesperson throughout the entire sales cycle. Common interests are the drivers for the collaboration and cooperation between the salesperson and the customer. During these cooperation tasks, fact-based business matters are discussed and personal experiences are exchanged. As it became apparent from the social cognitive neuroscience literature (Section 4.2.2), the human reward system may potentially be activated when the salesperson establishes a positive relationship and perceives the customer's mental situation. It seems to be positively stimulated and a potential interpersonal reward situation results. Hence, both business relationships and personal relationships are created through these interactions and collaborations between the salesperson and the customer. - The interview data seems to suggest that a personal relationship is built up in the unconscious mind of the salespeople and customers. In this context, the unconscious mind cannot be rationally explained by the salesperson. Therefore, this means that a personal relationship is established intuitively by the salesperson and he is unaware of how he	- Establish a personal relationship - Perceive the mental situation	Cooperation (Sections 4.2.2 and 7.2.2)

can build a personal relationship with the customer. - The interview data seems to suggest that the salesperson does not consciously try to find out what kind of mood or mental situation the customer is in while they are interacting. Salespeople try to build up a good atmosphere, but they do not completely understand how to perceive the customer's mental situation.		
Due to the fact that complex and customised products and services are consultancy-intensive for the salesperson throughout the sales cycle, salespeople attempt to treat the customers in a just and honest manner by offering several choices and balanced terms and payment conditions to the customer upon completing a business deal. This is consistent with the social cognitive neuroscience literature discussion in Section 4.2.3, which seems to suggest that behaving in a just and honest manner and meeting the customer's expectations positively stimulates the human reward system, and a potential interpersonal reward situation may be produced in the human brain. Hence, within salesperson-customer interactions, the customer must clearly feel when the salesperson is being fair in his dealings. - The interview data seems to suggest that balanced terms and conditions are not always provided despite being offered by the customer, so the customer does not have the discussed and agreed quotes submitted by the salesperson. This means that the salesperson is not meticulous in preparing the customer quotes. By not behaving fairly and not having the discussed and agreed information available, this unconsciously produces a threat situation in the customer's brain. Hence, this suggests that the salesperson is not aware of the interpersonal reward situation which is generated while offering a discussed and agreed quotation. - The interview data seems to suggest that the salesperson does not pay proper attention to detail to fulfil the customer's expectations. Rather, he is busy with his internal agenda. This means that the salesperson is unaware that not fulfilling the customer's expectations may lead to an interpersonal threat situation in the latter's brain. Therefore, this raises the question of how the salesperson can give the customer the perception that his expectations are being met.	- behave in a just and honest manner - meet the customer's expectations	Fairness (Sections 4.2.3 and 7.2.3)
During the entire sales process of complex and customised products and services, different decisions must be made by the salesperson and the customer so that the project can finally be realised. In many cases, there are technological uncertainties which the customer is not able to judge. As it is apparent from the social cognitive neuroscience literature (Section 4.2.4), giving the customer the perception of having the freedom to decide and not being too pushy seems to produce a rewarding situation where the customer is more open to making the final purchase decision. Therefore, the salesperson must be more reserved in the final stage of the discussion with the customer. - The interview data seems to suggest that the salesperson tries to give the customer the feeling that the decisions in a project were his own, even if this is not the case. It seems that it is not quite clear how a salesperson has to behave to convey the feeling that the customer's decision to buy was his alone. Therefore, this gives rise to the question as to what concepts the salesperson needs to apply to give the customer the feeling that the purchase and the decision to do so are his alone. - The interview data seems to suggest that the control behaviour is subject to direct or indirect instructions from the salesperson. The	- allow the freedom to decide - use adequate control behaviour	Autonomy (Sections 4.2.4 and 7.2.4)

salesperson tends to choose the particular solution for the customer. This means that salespeople in general are not fully aware that customers who are pushed towards a specific solution may find this rather threatening. In actual fact, using and applying adequate control behaviour would be much more rewarding for the customer.		
When doing business with complex and customised products and services, salespeople do not broadcast the status which is written on their business card. Instead, decent, respectful communication is vital. But salespeople do not know that the lower-ranking person unconsciously expects a certain protection from the higher-ranking person. This fact emerged from the social cognitive neuroscience literature review (Section 4.2.5). If a salesperson explains his company's business position carefully and reduces any potential impacts of the business position, this may produce an interpersonal reward situation in the human brain. Hence, the business position has a major effect on discussion and communication with people. - The interview data seems to suggest that higher-ranking salespeople do not notice the effect which their business position has on lower-ranking customers. This means that the salesperson may not be aware of the interpersonal reward situation which is generated while handling the issue of social status in front of the customer. - The interview data seems to suggest that salespeople do not reduce any potential impacts of their business position in the discussion with the customers. Explain the salespeople's experiences and responsibilities and discuss their role in respect to the company and its structure would be beneficial in discussions with customers. This suggests that it would be more rewarding for the customer's brain to reduce potential impacts.	- explain business position carefully - reduce potential impacts of business position	Social status (Sections 4.2.5 and 7.2.5)

Source: Author

As explained at the beginning of this section, customers want to deal with salespeople who can help them to solve their problems and who are able to create value. The findings of Section 6.2.3 also confirm that salespeople need superior technical knowledge about the products and services they are selling. This is in line with the literature review discussion in Section 3.3.3.1. Furthermore, consultative selling literature suggests that a buyer's experience and perception are managed by the salesperson's behaviour (Newell et al., 2011). Section 3.3.2.2 and the social cognitive neuroscientific literature show that there are social domains of experience which are related to the automatic and controlled brain networks of the human reward system (Dimoka et al., 2007). As most of the information is unconsciously perceived by the human brain, this means the influence on the automatic social cognition system is significant and must not be neglected when establishing a salesperson-customer relationship (Section 4.2). This is in line with the findings that salespeople need to understand the effects of the customer's automatic social cognition system and that they should therefore be able to emotionally support their customers so that a purchase decision results. If a salesperson can understand the different intuitively evaluated selling situations, such as those outlined above, this may help him to understand the customer and attempt to produce interpersonal reward situations in the customer's brain. The circumstances in which interpersonal reward situations could occur in the customer's brain are discussed in Section 2.2.4 of the literature review and in the conceptualisation in Section 4.3. The findings on

these intuitively evaluated selling situations will be incorporated into the finalised conceptual framework in Figure 22, Section 7.3.

6.2.4 Early Stage of a Salesperson-Customer Relationship and Beginning of the Co-Creation Process

This section will describe the early stage of a salesperson-customer relationship and the beginning of the co-creation process. Hereinafter, evidence will be provided from face-to-face interviews that the early stage of a salesperson-customer relationship is one of the most important of all, before a summary of the data from the three structured participant observations is provided. In addition to that, this data will establish what is clear or unclear and interpret it in relation to the social domain of certainty (Sections 4.2.1 and 7.2.1).

During the face-to-face interviews with the senior executive sales personnel and the high-level customers (Section 5.7.2), the participants frequently mentioned that the initial phase of a salesperson-customer relationship is one of the most important in the sales process of complex and customised products and services. This finding is also supported in the literature, which notes that an interpersonal relationship is most likely to start when the seller or buyer party does not focus solely on the monetary benefits, but rather is willing to take a risk and accept this risk (Weber et al., 2005). At this time, trust between the interacting parties is not yet given. Furthermore, the trust-building process passes through distinct development stages within an interpersonal relationship (Lewicki & Bunker, 1996). As the rate of positive interactions increases, the rational factors are pushed further into the background, while the relationship factors and behaviours come to the fore (Rousseau et al., 1998). However, during the initial stage of a relationship, the salesperson must be able to build up a personal connection with the customer.

> *"It is paramount [in a salesperson-customer relationship] that the [salesperson] creates a personal relationship with the customer. Specialist skills are naturally a key feature. A system like this is often put into an existing customer infrastructure with which the customer has a particularly special personal relationship. Perhaps he has developed something himself and loves it. Often it is then technical, where you need to show that you as the salesperson and as company can deal with the interface."* (Salesperson 18)

In initial customer meetings, salespeople try to be open about their personal situation. In this regard, Hutton (2005) took the view and argued that salespeople should not be too cautious with their personal information such as education or former employers when attending initial meetings. He also stated that salespeople should learn as much as possible about the customers in the early phases of contact. *Salesperson 10* sees it that way as well:

> *"When I meet the customer for the first time, I initially try to give a lot [of information] from my side and to tell him a lot about myself: my philosophy is to tell him where we are from, how we work, [and] how we see the world. That's generally*

a good start. I also attempt to find out additional things about the customer and not always just similarities." (Salesperson 10)

Thus, salespeople try to create a situation of certainty and familiarity in the early stage of a potential long-term salesperson-customer relationship. This stage was further investigated because it is precisely the first few minutes of a salesperson-customer relationship which have the greatest impact on its further development (Ingram et al., 2008; Petermann, 2013).

During the observations of the senior salespeople and the senior customers, the participants clearly showed that the early stage of a relationship is one of the most uncertain phases in the whole development process of a salesperson-customer relationship. The observation data provided evidence that the salesperson can reduce existing uncertain conditions such as technological uncertainty, market uncertainty, and unit one costs (Mohr et al., 2010; Sharma et al., 2008) during his initial contact with the customer. He can also make the customer comfortable and more open to a mutual discussion of problems and possible solutions by giving him insights into the company, its processes and its structure. The salesperson can provide the customer with more details about the products and services or, at the very least, tell the customer what he wants to hear. At the same time, the salesperson can generate positive impressions and a future perspective by giving him insights into existing products and his previously concluded business with other customers. If the interaction (Weber et al., 2005) in this initial meeting is positive, mutual trust and the development process of a salesperson-customer relationship can start (Section 3.4.1). Table 15 below presents how the three initial salesperson-customer meetings proceeded. In particular, the researcher observed whether the three concepts of the social domain of certainty (Section 7.2.1) were acted out by the salesperson, and if so, the order in which the three concepts occurred during the interaction (Section 5.7.3).

Table 15: Overall Assessment of the Salesperson-Customer Observations

Statements about the observations	Findings from the observations	Interpretation of the findings
In dyadic relationship 1, the salesperson tried to: (1) clarify the customer's expectations, (2) establish a positive relationship on a common basis, (3) demonstrate technical and social competence. In dyadic relationship 2, the salesperson tried to: (3) demonstrate technical and social competence, (1) clarify the customer's expectations, (2) establish a positive relationship on a common	- Dyadic relationship 1 started with the salesperson clarifying the customer's expectations, and so did dyadic relationship 3. - Dyadic relationship 2 started with the salesperson demonstrating technical and social competence. - The salesperson in dyadic relationship 1 presented a short agenda at the beginning on how the meeting should take place. This was appreciated by the customer. - The salespeople in dyadic relationship 2 and 3 did not	The three observations clearly showed that this early phase of the relationship is used: - to get to know the preferences of the customer and to establish a basis for dialogue, - to establish a close bond and try to see the customer how he really is, - to understand the business processes, technologies, and objectives, - to prospect and to pre-approach the customer and to understand the customer value.

basis. In dyadic relationship 3, the salesperson tried to: (1) clarify the customer's expectations, (3) demonstrate technical and social competence, (2) establish a positive relationship on a common basis.	present any agenda.	

Source: Author

It does not seem to make any difference in which order the three concepts are used; it is only important that they are used in the communication strategy with the customer. The order of the three concepts of the social domain of certainty was different in all the meetings, and the meetings did not proceed in the same manner. All the salespeople demonstrated cooperative behaviour and invited the customer to participate in the co-creation process (Section 3.4.2) through their interactions. In so doing, the salespeople allowed the customer to become a co-creator of value and consequently, to become a partner for any potential projects together.

The three dyadic relationships progressed identically in their basic form (Appendix D). The salesperson began the meeting by asking about the customer's well-being. Afterwards, the salesperson in dyadic relationship 1 presented a short agenda at the beginning of the meeting detailing how it would take place; however, the salespeople in dyadic relationship 2 and 3 did not present any agenda. As mentioned in Section 3.4.1, the behavioural intentions of the interacting parties are not yet clear during the first phase of salesperson-customer contact, and the situation is characterised by uncertainty and risk (Ingram et al., 2008). Therefore, the salesperson must set a clear agenda which shows exactly what he wants to convey and to achieve within this first meeting.

Both dyadic relationship 1 and 3 started with the salesperson clarifying the customer's expectations, whereas dyadic relationship 2 started with the salesperson demonstrating technical and social competence. By clarifying the customer's expectations at the beginning of the meeting, Salespeople 1 and 3 knew what the customer expected from them. They were therefore able to immediately estimate which expectations could be met and which could not, i.e., what the customer could expect from the salesperson as the relationship progressed. By demonstrating technical and social competence, the salesperson tried to find out the customer's applications and the related technical problems. At the same time, it was essential to understand the customer's personal needs and preferences because this helped them to start an interpersonal relationship with the customer. This is in line with Weber et al. (2005), who stated that an interpersonal relationship is most likely to begin when one of the parties is not focused on the monetary benefits but instead on producing added value, and when this party is willing to take a risk and accept this risk.

Interaction and dialogue are required with the customer over the further course of the relationship (Payne, Storbacka, & Frow, 2008). Once the expectations are clear and the salesperson and the customer know why they are interacting with each other, the salesperson needs to show how he can offer the customer value (Section 3.4.2). Customer value is a subjective perception by a customer of what a complex and customised product or service is worth vis-a-vis possible alternatives (Corsaro & Snehota, 2010; Pekkarinen, Ojanen, & Keränen, 2011). Bearing this in mind and by knowing the customer's expectations, it is easier for a salesperson to establish a positive relationship on a common basis. If the customer's expectations are not known, it is very difficult for the salesperson to establish a positive relationship in this manner. Some background information will remain hidden and the customer's personal situation will also still be unclear even if the salesperson would like to know this information. Over the further course of an interpersonal relationship, it is essential to understand the customer's personal needs and preferences. During the final stage, it is most effective if the salesperson does this interactively as it encourages the customer to reflect effectively on his situation and the technical difficulties which still need to be resolved. During the discussion of these technical difficulties, further actions are defined that are followed up in the next meeting. Table 16 below shows what is clear and unclear after the early stage of a salesperson-customer relationship.

Table 16: Uncertainties in the Early Stage of a Salesperson-Customer Relationship

Uncertainties	Certainties	Interpretation in relation to the social domain of certainty
- How does the interpersonal relationship between the salesperson and his customer develop? - How much risk is the customer willing to take? - How interested is the customer in the products and services offered by the salesperson?	- What are the benefits the salesperson can potentially bring to the customer? - What are the customer's applications and technical problems? - How can the co-creation process be started?	The social domain of certainty with its concepts of (1) clarifying the customer's expectations, (2) establishing a positive relationship on a common basis, and (3) demonstrating technical and social competence helps to overcome the uncertainties in the relatively early stage of a salesperson-customer relationship. If these concepts are used, this may facilitate the start of a long-term relationship between the two parties. In conclusion, after the initial stage of a salesperson-customer relationship, the interpersonal domain is relatively unknown, whereas the customer's applications and technical problems are clear.

Source: Author

The three observations clearly show that the early stage of a salesperson-customer relationship is used by the salesperson to get to know the preferences of the customer and to establish a basis for dialogue. Furthermore, the salesperson tries to establish a close bond with the customer and to see how the customer really behaves and reacts. In addition to

that, this early stage is used to understand the business processes, technologies, and customer objectives for prospecting purposes and to pre-approach the customer. Finally, this early phase is used to understand the customer value and to invite the customer to participate in every phase of the sales cycle (Section 3.4.2) to be part of the final solution of the complex and customised product and service. This will ensure that the final solution is co-created rather than value being created by only one side (Grönroos, 2008).

6.3   Conclusion

Section 6.2.1 provided a detailed analysis of the 22 companies in which the interviewed senior executive salespeople and high-level customers were employed at the time of the data collection phase. The companies were classified according to their products and services and the segments (industries) in which they operate. The 18 seller companies develop, produce and distribute complex and customised products and services and, in accordance with NACE code, all of them could be divided into high-technology and medium-high technology products, and high-technology knowledge-intensive services. The findings in Section 6.2.1 are in line with the literature on personal selling of complex and customised products and services. These products and services are consultation-intensive and require highly educated salespeople with in-depth communication skills and a close relationship with their customers (Haas et al., 2012; Zakrzewska-Bielawska, 2010).

Section 6.2.2 contained a detailed analysis of the 18 face-to-face interviewed senior executive salespeople. Person-specific characteristics such as age, education, experience in the field of selling complex and customised products and services, and the personal selling style were examined. Each salesperson has a pre-dominant selling style, and each of them was classified as either *'correct'*, *'enthusiastic'*, *'hard-seller'*, or *'empathic'* (Häusel, 2015). The unconscious assessment of the limbic system is included in these four basic prototypes of personal selling style. This involvement of the unconscious assessment of the limbic system is important due to the fact that 90% of the information which reaches the human brain is processed unconsciously (Zurawicki, 2010). This means that researchers have already tried to include the automatic social cognition system and therefore, the latest findings of neuroscience in current and future salesperson-customer relationship studies. The gathered data and description of the senior executive salespeople is in line with the existing literature on personal selling of high-technology products and services, e.g. Alamäki and Kaski (2015), Sharma et al. (2008), and valid in the context. Furthermore, it confirms Bradford et al. (2009)'s argument that the salesperson has the most important role and responsibilities relating to the building of a long-term salesperson-customer relationship.

Section 6.2.3 presented quotes from the interviews with senior executive salespeople and high-level customers which suggest that there are still intuitively evaluated selling situations. These selling situations were described in a table and it was possible to assign them to one of the social domains of experience (Sections 4.2.1 – 4.2.5 and Sections 7.2.1 – 7.2.5). This

means that a connection between these selling situations and the automatic social cognition system which processes information unconsciously might be established with these social domains. As a result, one of the reasons why these intuitively evaluated selling situations cannot be explained by the salespeople is because the latter do not understand the unconscious and the conscious parts of the human reward system and are not aware of the type of potential interpersonal reward situations that exist in the various customer contact situations. This is why the social domains of experience are essential in salesperson-customer interactions. In fact, the social domains of experience provide the salesperson with an explanation of how interpersonal reward situations could be produced in the customer's brain and what the salesperson needs to do in the various customer contact situations to positively activate the human reward system.

Section 6.2.4 described the early stage of a salesperson-customer relationship and the beginning of the co-creation process. The three observations clearly showed that this stage is used by the salesperson to get to know the customer's preferences and to establish a common basis for dialogue. Furthermore, the salesperson tries to establish a close bond with the customer and to see how the customer really behaves and reacts. In addition to that, this early stage is used to understand the customer's business processes, technologies, and objectives, for prospecting purposes and to pre-approach the customer. Finally, this early phase is used to understand the customer value and to invite the customer to participate in every phase of the sales cycle (Section 3.4.2) to be part of the final solution of the complex and customised product and service. If the customer is involved in each phase of the sales cycle, the final solution is co-created rather than only creating value from one side (Grönroos, 2008).

Chapter 7 will present the empirical findings from the interview data for the social domains of experience which were gathered in the high-technology B2B context in Central Europe.

7 EMPIRICAL FINDINGS FOR THE SOCIAL DOMAINS OF EXPERIENCE

7.1   Introduction

Chapter 7 will present and discuss the empirical findings for the five social domains of experience which emerged during the three phases of data collection (Section 5.6.2, Table 8). It is divided into three main parts.

Section 7.2 will present the topics and concepts which emerged that have the potential to produce interpersonal reward situations within the customer's brain. Based on the literature review, the presentation and discussion of the data are therefore divided into five categories: social domain of certainty (Section 7.2.1), social domain of cooperation (Section 7.2.2), social domain of fairness (Section 7.2.3), social domain of autonomy (Section 7.2.4), and social domain of social status (Section 7.2.5). The interview data of the three salespeople from the pilot phase will be presented along with the interview data of the 15 salespeople from the main phase. The interview data of the 18 (3 + 15) salespeople will be supplemented with the perspectives of four customers. The customer data will be presented separately to determine whether the views of salespeople and customers are comparable. In Section 7.3, the findings from the 22 face-to-face interviews with senior executive sales personnel and high-level customers will be summarised and synthesised. Furthermore, within this section, the outcomes will be discussed in relation to the literature review. Finally, in Section 7.4, conclusions will be drawn based on the afore-mentioned discussions.

7.2   Presenting the Topics and Concepts that Emerged from the Interview Data

Section 7.2 is divided into five Sections 7.2.1 – 7.2.5, each of which refers to one of the five social domains of experience which were introduced in Sections 4.2.1 – 4.2.5. Each social domain is referred to as a category in the subsections. These categories arose from the synthesis of the literature reviews in Chapters 2 and 3. The superordinate constructs are defined as topics and the subclasses as concepts. These topics and concepts emerged from the interview data. The naming of the categories, topics and concepts is in line with Mayring (2010)'s category development procedure, which is the basis for this analysis and provides the foundation to synthesise the emerging topics and concepts from the interview data with the respective category (social domain of experience).

Each of the five subsections is structured as follows: relevant quotes are presented to set the context for each social domain of experience before the actual analysis is conducted. Secondly, the category, the topic and a summary of the concepts for each social domain are provided in tabular form. Subsequently, each focused coding is described in detail and underpinned with typical quotes. Fourthly, the answers from the closed-ended questions are presented and also supported with quotes. These quotes provide additional information to better understand each of the social domains of experience. Finally, the discussion and the summary are presented to show how salespeople attempt to produce interpersonal reward

situations in the customer's brain and what salespeople do in specific customer contact situations to develop and maintain a long-term salesperson-customer relationship.

The analysis is structured in such a way that each of the five categories represents one part of a pentagon in the finalised conceptual framework. The finalised conceptual framework (Section 7.3) is a synthesis of the literature review (Chapter 4) and the empirical findings (Sections 7.2.1 – 7.2.5).

7.2.1 Social Domain of Certainty

This section will present the findings for the social domain of certainty, which was introduced in Section 4.2.1. This social domain investigates how salespeople create a sales situation in which the customer is provided with sufficient relevant information, thereby convincing him that the available knowledge is legitimate and does indeed correspond to the real situation.

The data from the interviews shows that potential customers in the high-technology B2B sector with its advanced technological products and services usually know the seller company and its products and services very well. However, a personal connection needs to be established between the salesperson and customer. To facilitate this, salespeople try to minimise existing uncertainties in the initial customer contact phase.

> *"I would not say so, because our company is very well known; the customer always knows exactly what is coming [in terms of products and services]. We [as a company] and our products are known. If we visit a customer, he knows [which company] is coming and what the meeting is all about. The company [and its products and services] do not have to be presented, but the relationship between the people involved must be established." (Salesperson 17)*

Furthermore, salespeople in this sector and their products and services are often recommended by third parties by positive WOM before an initial meeting between the buyer and seller companies takes place.

> *"In fact, I do not have to reduce potential uncertainties when meeting a new customer because he already knows me from third parties before I meet him for the first time. Customers find out about us beforehand and then approach me with confidence. These meetings take place at short notice and quickly. Usually I'm recommended by third parties. That is already the cornerstone of the relationship." (Salesperson 15)*

As mentioned in Section 6.2, the advanced technological products and services in the industrial goods sector are not yet fully developed at the time of a sale. Personal selling and the relationship between the salesperson and customer is essential in such situations, as is evidenced by the following quote:

"In some cases, the customer has such a high level of trust in us that he buys the system even if it is in the development phase. The deciding factor in the end is always the personal relationship [I have with the customer]. There is always a way to develop the system, but the drive to complete this development is stronger if the buyer has already been found." (Salesperson 18)

In addition to the technological uncertainty, there is the market uncertainty (Section 6.2). Salespeople need to be aware that the future is associated with many changes because the technology in the industrial goods sector is closely linked with innovation and changes in the environment.

"The first problem I have to consider is that the future is often associated with innovation. This also means time savings as well as financial and human resources. These savings threaten the buyer company and therefore jobs. Specifically, the current situation must be known to all the parties involved. The future must be developed from this. The target must be described so that the customer is aware of the ultimate goal." (Salesperson 6)

Salespeople must be aware of their customers' needs and ensure that the procured technology and related systems and services can be maintained for many years by the seller company.

"Salespeople who just come and try to grasp and get a feel of the situation as well as to try and find out where our needs are, they're the ones who really grab my attention. I only make strategic decisions. Buying decisions are the job of our buyers. My time horizon is one to five years. Therefore, only a few salespeople have the chance to speak to me; only those who have really thought about the needs of our company." (Customer 4)

Long-term salesperson-customer relationships need up to three years for mutual trust and commitment to fully develop on both sides (Palmatier, 2008; Weber et al., 2005), which means that salespeople in this field have be highly skilled, motivated and passionate about their job (Sharma et al., 2008; Swan et al., 1999).

Table 17 below summarises the empirical findings of the social domain of certainty. These findings contribute to the finalised conceptual framework (Section 7.3) by illustrating how a salesperson creates a sales situation with sufficient relevant information with his cognitive performance. These findings represent the first of five parts of the finalised conceptual framework, which shows a way to create a window into the black box of the customer's mind during the development and maintenance of a long-term salesperson-customer relationship.

Category	Creating a sales situation with sufficient relevant information.
Certainty	How to reduce potential doubts which are present on both sides in the initial phase of a customer contact situation, and how to generate future prospects which correspond to the positive experiences of the customer.
Focused coding	
1	Clarify the customer's expectations
2	Establish a positive relationship on a common basis
3	Demonstrate technical and social competence

Topic for certainty
The social domain of certainty encompasses the concepts of <u>clarifying the customer's expectations,</u> <u>establishing a positive relationship on a common basis</u> and <u>demonstrating technical and social competence</u>.

Source: Author

Table 17 below shows how salespeople create a sales situation with sufficient relevant information, and illustrates what was said by the participants of the study. Neuroscientific research shows us that interpersonal reward situations are produced in the customer's brain when the salesperson reduces potential doubts and generates future prospects (Section 4.2.1).

Tables 18 – 20 provide the focused coding for 1, 2 and 3 for the social domain of certainty.

Table 18: Focused Coding Number 1 of Certainty

Focused coding 1
Clarify the customer's expectations Clarify the customer's expectations and take a cautious approach to the new relationship to understand the customer and meet his needs.

Salespeople: 1, 2, 4, 6, 8, 9, 10, 15, 16 Customers: 1, 2, 3, 4	Refer to reference projects, application notes and quality standards/confidentiality agreements and utility models and items on loan
The following quotes illustrate how salespeople attempt to clarify the customer's expectations (salespeople left/customers right):	
"Repeat what I think I've understood, give [the customer] feedback about his issue… at a technical level, with numbers, data, facts… using reference projects and application reports of technical solutions to	*"Sales managers mostly do that with references and reference projects. They present their successful reference projects, and in the process always attempt to create a*

show him that his desired applications can be resolved in this manner. Naturally also through quality standards, certificates, service life information, transparent documentation; all of this must show the customer how reliable the solutions are." (Salesperson 2)	*connection with a current, also joint project."* (Customer 2)
	"Salespeople always know exactly what we do and which tools we use. They are really well informed. They always also know exactly how the competitors are acting. They always have a plan and an intention... concepts have always emerged together on the table." (Customer 3)
"The customers always treat me fairly because we define the expectations on both sides to the letter." (Salesperson 15)	

Source: Author

Nine of the salespeople and four of the customers mention that they attempt to clarify the customer's expectations at the beginning of a salesperson-customer relationship. As is evident in Table 18, the salespeople and the customers interviewed firmly believe that the salesperson should refer to reference projects, application notes and quality standards. Furthermore, salespeople should point to confidentiality agreements and utility models and items on loan.

Table 19: Focused Coding Number 2 of Certainty

Focused coding 2	
Establish a positive relationship on a common basis	
Build on their existing knowledge base and create a fact-based situation with transparent information to establish a personal connection with the customer	
Salespeople: 3, 5, 7, 9, 10, 11, 12, 14, 18 Customers: 1, 2, 3	Find out what the customer knows about the technology, background information on the customer/understand the personal situation of the customer
The following quotes illustrate how salespeople attempt to establish a positive relationship on a common basis (salespeople left/customers right):	
"I can create memories and experiences related to myself/our product by giving a potential customer the opportunity to carry out initial test runs with our products. The more opportunity I give him to work with our product, the more experiences and memories he can naturally gather." (Salesperson 3)	*"All the salespeople have always fallen back on their existing work and have focused on what they have achieved, such as: we have never had quality problems, we work very well with development. Based on these facts, they have always said they would like to do something more on this basis."* (Customer 1)
"Capital goods often tie into an existing basis. And that is a part of the process itself; it's a matter of also trusting that you can explain your situation to the customer, and in doing so show that you understand his situation." (Salesperson 18)	*"They attempt to find a mutual basis. In our sector, it doesn't take long for you to find common discussion topics."* (Customer 3)

Source: Author

Nine of the salespeople and three of the customers bring up the need to establish a positive relationship on a common basis. They mention that it is most important to find out what the customer knows about the technology and gather background information on the customer. Furthermore, they say it is also necessary to understand the customer's personal situation.

Table 20: Focused Coding Number 3 of Certainty

Focused coding 3
Demonstrate technical and social competence
Show technically skilled and socially competent behaviour so that the customer experiences consistent behaviour from the salesperson at different points in time.

Salespeople: 1, 2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 18 Customers: 1, 2, 3, 4	Understand the intended applications of the product that the customer wants to buy, along with the customer's technical problems/customer's personal needs and preferences
The following quotes illustrate how salespeople attempt to demonstrate technical and social competence (salespeople left/customers right):	
"With technical info, I'm open about what I know, where possible, and I try to reassure the customer by attempting to understand what he himself understands... then to configure the system together with him based on these applications. The customer needs to understand the point of the configuration and how you get to it. He normally wants to reach a decision." (Salesperson 1) *"I listen [to the customer] when he tells me what his work entails. The idea is to kick off the process of getting to know one another, to find out who you are dealing with and what you are both talking about. Information about the company is usually available; however, information about the customer, in particular personal details, is not available in advance. I am interested in what he does personally, not only about the company... if I have discovered his interests, then I naturally talk to him about them. Technology, processes, training knowledge." (Salesperson 9)*	*"We mainly discuss factual matters. The personal side of things comes later." (Customer 2)* *"There are two types of salespeople – those who are confident and those who are not. When a salesperson has a strong personality, he tries to sell on the strength of himself as a salesperson, his company and the products themselves. And when he has a weaker personality, then he attempts to sell to me on the strength of the products [alone]... In my opinion, it's the personality which decides everything in the initial phase." (Customer 4)*

Source: Author

Fourteen of the salespeople and four of the customers mention that the salesperson needs to demonstrate technical and social competence, and make a genuine effort to try and understand the intended applications of the product in question along with the customer's technical problems. Moreover, they say they should attempt to understand the customer's personal needs and preferences.

7.2.1.1 Transparency with Information

Table 21 below presents the findings of Question five on how often the salespeople are transparent with information when talking to the customer.

Table 21: Transparency with Information

Category certainty		
Transparency with information when talking to the customer		
Salespeople: 6, 7, 9, 12, 16, 18	Customer: 0	always
Salespeople: 1, 4, 5, 10, 14, 15, 17	Customer: 1, 2, 3	often
Salespeople: 2, 3, 8, 11, 13,	Customer: 4	sometimes
The following quotes illustrate why salespeople are not always transparent with information when talking to the customer (salespeople left/customer right):		
"I can never be fully transparent because I would never earn any money. In a situation where I do not have anything to lose, I'm definitely transparent. I live from what I sell to the customers. When it comes to money, I do not have full cost disclosure. This is also one point of [personal selling]." (Salesperson 3) *"We salespeople have always made sure that we are up with the play on the latest developments. But, if you communicate this to the customers too early, this may then have a negative impact, because we sometimes deliver systems in an unfinished state." (Salesperson 8)* *"You can't always be transparent. There are various technological matters which the customers mustn't know. I'm very often transparent, but not always." (Salesperson 17)*	*"I as a [customer] want to know things that [the salespeople] are generally not open about. I want to know the product and the price structure. These things are often not transparent. [Salespeople] are mostly transparent in other matters. But that is sometimes no help to me." (Customer 4)*	

Source: Author

Table 21 shows that six of the salespeople claim they are always transparent when providing information to their customers. However, this is not supported by any of the customers. They believe that the salespeople are not always transparent with them. Seven of the salespeople say that they are often transparent. Three of the customers support this. Five of the salespeople state that they are only sometimes transparent with the information that they give to the customer. This is supported by one customer. The above-mentioned quotes show why salespeople are not always transparent with information when talking to the customer. Customers generally want to know facts which the salesperson is not able to or not allowed to provide during the communication with the customer.

7.2.1.2 Positive Customer Experiences

Table 22 below presents the findings of Question six on how often salespeople build on positive customer experiences.

Table 22: Positive Customer Experiences

Category certainty		
Build on positive customer experiences		
Salespeople: 1, 2, 5, 6, 9, 10, 11, 14, 17, 18	Customer: 1	always
Salespeople: 3, 4, 7, 8, 12, 15,	Customer: 2, 3	often
Salespeople: 13, 16	Customer: 4	sometimes
The following quotes illustrate why salespeople are not always able to build on positive customer experiences (salespeople left/customer right):		
"This was impossible with one customer. We had tried to introduce our products to him for years, but never got anywhere as he associated us with bad experiences." (Salesperson 5) *"I often try [to build on good experiences], but it is impossible to do it all the time. I do not always have all the required information available to start a conversation which builds on positive experiences because sometimes I am meeting the customer for the first time."* (Salesperson 7) *"This is something very positive that you can build on. If you have good experiences with the customer, then you can always start with these good experiences and give him a new serving of positive experiences to take with him. This is very important for a salesperson and must be done in the right way."* (Salesperson 17)	*"Salespeople have always started with a positive story, no matter how and what the purpose of the conversation was. However, I have always ignored this. I wanted to focus on the matter at hand and not allow any banter."* (Customer 1)	

Source: Author

Table 22 shows that 10 of the salespeople always build on positive customer experiences. This statement is supported by one customer. Six of the salespeople say that they often build on positive experiences; whereas, only two of the customers support this. Only two of the salespeople state that they sometimes try to build on positive experiences. The subsequent discussion of the findings of Section 7.2.1 and the responses of the senior executive sales personnel and the high-level customers will be discussed further in Section 7.2.1.3.

7.2.1.3 Building the Conceptual Framework: Adding the Domain of Certainty

This section will discuss the findings for the social domain of certainty and their relevance in creating a sales situation with sufficient relevant information. The social domain of certainty encompasses the three concepts of *clarifying the customer's expectations*, *establishing a positive relationship on a common basis* and *demonstrating technical and social competence*. These concepts have the potential to produce interpersonal reward situations within a customer's brain that may lead to the development and maintenance of a long-term salesperson-customer relationship (Figure 17). The findings for transparency with information (Section 7.2.1.1) and positive customer experiences (Section 7.2.1.2) are integrated into the second layer of the following figure and discussed further in Section 7.2.1.4.

Figure 17: Elaborated Conceptual Framework for Certainty
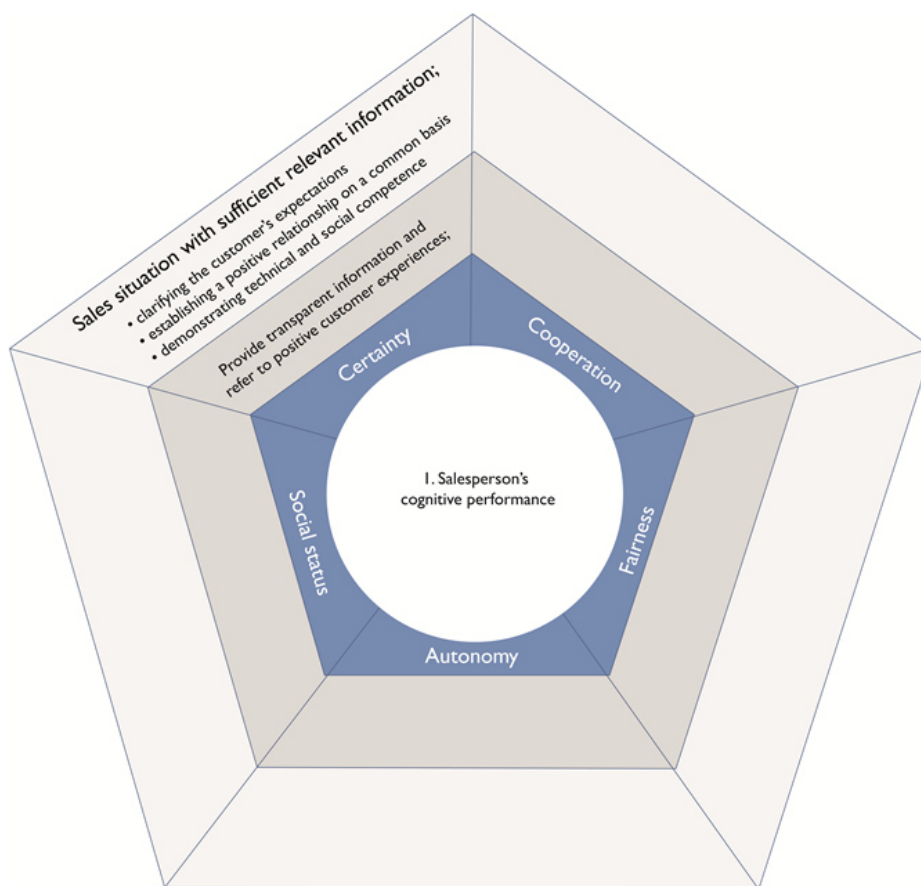
Source: Author

The findings for the social domain of certainty demonstrate that the initial phase is one of the most important in the development of a long-term salesperson customer relationship. Risks and uncertainties are particularly prevalent at this early stage of a sales process involving complex and customised products and services, and if one party has to decide whether to continue the sales process, or not. Therefore, it is very difficult for the salesperson and the customer to estimate the risk at this stage of their relationship. This explains why salespeople must *clarify the customer's expectations*, try to *establish a positive relationship on a common basis* and *demonstrate technical and social competence*.

The findings show that an interpersonal relationship is most likely to begin when one of the parties is willing to take and to accept the risk and trust the other. In line with Weber et al. (2005) and Petermann (2013), they also reflect the starting point of trust in the relationship, which was discussed in Section 2.2.5.

The uncertainties most frequently mentioned by the participants of this study are competitive volatility along with market and technological-based uncertainties. These findings are consistent with Sharma et al. (2008) and Mohr et al. (2010) and indicate that the reduction in uncertainly not only relates to the salesperson's skills and competences but also to how transparent a salesperson is towards the customer. From the findings, it is evident that the more transparent a salesperson is within his range of possibilities, and the more he builds on positive customer experiences, the more certainty he generates in a sales pitch.

When being transparent, a salesperson must clearly communicate his expectations to the customer and offer him the opportunity to do the same so that the concept of clarifying the customer's expectations can be exercised. This is in line with Blocker et al. (2012)'s findings that a salesperson who acts confidently and has sound expertise generates more certainty and customer value in such situations. Therefore, the findings of clarifying expectations are in line with Bruhn (2013), who argued that the fulfilment of customer expectations leads to customer satisfaction in the relationship with the salesperson. The findings also show that salespeople refer to reference projects, application notes and quality standards. Furthermore, salespeople also use confidentiality agreements and utility models and items on loan to convince the customer to start a project.

The interview data shows that uncertainties are not just reduced by hard facts but also by intuitive elements which help this happen. They indicate that salespeople do not have sufficient understanding of how they can consciously reduce existing uncertainties on the customer's side (Section 6.2.3). Furthermore, the interview data shows that salespeople try to generate future prospects which correspond to the positive experiences of the customer, but they do this unconsciously rather than overtly (Section 6.2.3).

Additionally, the findings of this study also show that the development of a relationship in the high-technology B2B sector in Central Europe with complex and customised products and services occurs over the long term. Such a relationship can last at least 15 to 25 years, or even longer. Thus, the salesperson also needs to focus on the future and know in which direction the relationship should develop in the long term (Palmatier, 2008). The findings indicate that the salesperson must establish a relationship based on a customer's positive experiences (Section 7.2.1.3). This in turn provides positive impetus to jointly develop new experiences. The interview participants all state that a personal relationship will not develop into a high-quality relationship if a salesperson does not realise this. Therefore, the concept of establishing a positive relationship on a common basis is very important. This is in line with the findings of Squire et al. (2009), who investigated knowledge transfer in buyer-seller relationships. The findings of this study show that this knowledge transfer is crucial for a salesperson and a customer to achieve a common goal, and also to acquire the necessary relevant information. Furthermore, salespeople try to find out what the customer knows

about the technology and to gather information on the customer before meeting him the first time. They also show that salespeople try to understand the personal situation of the customer.

Further results reveal that the salesperson's expertise is essential during this initial phase: the customer's level of knowledge of complex and customised products and services tends to be high, but he does not know all the specifics. This in turn means that the salesperson needs to demonstrate a high level of expertise coupled with sound social competence. In line with the findings, Castaldo (2007) argued that the cognitive antecedents of skills and competences activate human mental processes and also have cognitive consequences such as an increase in commitment and uncertainty reduction. Perceived expertise on the customer's side is a predictor of an increase in customer trust in a salesperson, which results in a higher quality relationship (Beatson et al., 2008).

The findings from the interviews indicate that the deciding factor in the first phase of the initial meeting is very often the personality of a salesperson. If a salesperson behaves in an uncertain manner, i.e., if he is not clear in his technical explanations, the customer not only doubts the competence of the salesperson but also questions the reliability of the products and services themselves. Therefore, salespeople must ensure that their technical knowledge is up-to-date and also demonstrate social competence, which is reflected in the concept of demonstrating technical and social competence. The interview findings for certainty show that salespeople try to understand the intended applications of the product that the customer wants to buy, along with the customer's technical problems. They also show that salespeople try to find out the customer's personal needs and preferences.

7.2.1.4 Synthesising the Empirical Findings with the Literature for the Social Domain of Certainty

This section will synthesis the empirical findings with the literature for the social domain of certainty. In reflecting on the concepts of the social domain of certainty, a salesperson with his cognitive performance (Section 2.2.5) who applies these concepts has the potential to activate the customer's automatic social cognition systems underlying the human reward system. An urge is registered as a conscious desire and the customer's controlled social cognition system is activated. This causes an action to fulfil the desire. If the desire is fulfilled, a feeling of satisfaction could arise and an interpersonal reward situation may be produced in the customer's brain (Section 4.3.2). In other words, an interpersonal reward situation could arise because the customer's positive expectations for the salesperson's behaviour are met.

The dimension of social cognitive neuroscience shows what occurs in the human reward system and the related brain regions of the customer, and how the customer perceives certainty (Section 4.2.1). By neglecting these concepts, a salesperson may in effect induce a threat situation which could potentially lead to a breakdown in the relationship between a salesperson and his customer. This is in line with the argument of Thayer et al. (2012), who stated that the standard answer to uncertainty is that the threat response and sensitive

functions of the controlled social cognition system play a reduced role in the process (Thayer et al., 2012). Other findings indicate that certainty should be one of the goals in the negotiation of a sales deal because certainty makes decision-making much easier (Dimoka et al. (2007).

There is additional evidence (Section 7.2.1.1) which shows why the salesperson cannot always be transparent with his information to the customer and therefore fulfil the expectations to be fully transparent with information. Further evidence (Section 7.2.1.2) shows why a salesperson cannot always build on positive customer experiences. On the one hand, the latest technological developments cannot be communicated too early because this would have a negative impact on the ongoing business with other customers who have not ordered the very latest developments. On the other hand, the salesperson always needs to judge just how much the customer needs to know about the technology. At a certain time, it can be confusing to know too many details as the high-technology market is a very complicated market in terms of personal selling. This is in line with Ingram et al. (2008) and their personal selling approach.

The findings in this section indicate that it is important for a salesperson to implement these three concepts of certainty as part of their sales strategy. In this way, interpersonal reward situations may be produced in the customer's brain under certain circumstances (Carter, 2009) and a long-term salesperson-customer relationship could develop. This is turn could lead to purchase and repurchase intentions on the customer's side as well as positive recommendations of the salesperson and the respective products and services.

7.2.2   Social Domain of Cooperation

This section will present the findings for the social domain of cooperation, which was introduced in Section 4.2.2. This social domain investigates how salespeople recognise the customers' personal interests and mental situation in specific sales interactions.

The results show that personal relationships between salespeople and customers in the high-technology B2B sector are always based on the commercial interests of both parties. At the beginning, technical issues are discussed, project negotiations are conducted and an initial agreement is concluded through mutual concessions. It is only when this initial phase is successfully completed that personal relationships can arise.

> *"Personal relationships always arise based on business which has been done together, or on a [technical] problem which has been solved together, or on negotiations from which a consensus was found. Only at a later stage does personal contact eventuate. But this presupposes that both sides like each other." (Customer 2)*

After common successes and after working together for some time, personal relationships result in which private matters are discussed.

"[Personal relationships] arise after the first joint successes. In many cases, I can solve the customer's problems. The relationship is then established on these joint successes… It takes around 1.5 years for a personal relationship with the customer to eventuate." (Salesperson 15)

A prerequisite for a personal relationship with the customer is regular contact with the latter through visits, emails or phone calls.

"I build up a personal relationship with my customers by visiting them regularly. I also frequently exchange information by e-mail, or by phone… However, I always start a conversation with some business-related topics. I then realise how open the customer is to discussing private matters… Sometimes I tell [him] a story from my private life and then see how the customer reacts." (Salesperson 4)

If this initial phase of about 1.5 years is over, personal relationships are established by addressing common ground such as family, hobbies, holidays and leisure activities, talking about personal experiences, solving the customer's problems, celebrating joint successes and discussing the mood by directly addressing the situation. However, very few salespeople know how to try and understand what the customer is thinking and feeling.

"I don't think I'm totally aware of how the customer feels. However, I'm trying to see the situation through the customer's eyes. I guess I can sense the situation somewhat, more perhaps his way of thinking… I really don't believe I'm able to fully understand, analyse and grasp such a situation, or to understand emotional processes rationally. Honestly, I don't really try to understand these processes from a rational perspective because I don't believe I can do it." (Salesperson 1)

In many cases, at the beginning of a salesperson-customer relationship, little is known about the customer. It takes time get to know each other and these salespeople do not try to put themselves into the customer's situation.

"I don't try to put myself into his situation. That would be too far-fetched and I don't know the customers well enough. When I realise that there is something wrong with the customer, emotionally or cognitively, then I address him directly and tell him that I've noticed that he isn't ok. Maybe I look to make the next appointment. Some of them find this great and confirm immediately, but most of them tell me roughly what is not ok at the moment." (Salesperson 16)

Some of the salespeople and customers interviewed do not try to delve into the mental state of the customer because they do not feel that they are in a position to do so or they do not think they have the requisite skills.

"Salespeople have never tried. Maybe, it was too intimate for them. There have been meetings in which I was stressed out and they each noticed this as well. But no one had the courage to ask closer questions… But if someone had asked, I would have discussed how I was feeling during a short break. I would have reacted in any case. It

would have definitely helped me if someone had addressed the situation to relax the atmosphere of the meeting a little bit." (Customer 1)

This means that salespeople do not consciously try to perceive the customer's mental state in particular situations. Instead, some of them try to see the current situation through the customer's eyes.

Table 23 below summarises the empirical findings of the social domain of cooperation. These findings contribute to the finalised conceptual framework (Section 7.3) by illustrating how a salesperson recognises the customer's personal interests and mental situation in a specific sales situation. These findings represent the second of five parts of the finalised conceptual framework, which shows a way to create a window into the black box of the customer's mind in the development and maintenance of a long-term salesperson-customer relationship.

Table 23: Findings for Cooperation

Category	Recognising customers' personal interests and mental state.
Cooperation	How to establish and develop a personal relationship with the customer and how to perceive the customer's mental situation.
Focused coding	
1	Create shared experiences
2	Renunciation of self-interest
3	Empathise with the customer

Topic for cooperation
The social domain of cooperation encompasses the concepts of <u>creating shared experiences,</u> <u>renouncing self-interest</u> and <u>empathising with the customer.</u>

Source: Author

Table 23 shows how the salespeople recognise their customers' personal interests and mental situation, and it also contains the focus coding from the interview texts. Neuroscientific research shows us that interpersonal reward situations are produced in the customer's brain when the salesperson develops a personal relationship with the customer and perceives the customer's mental situation (Section 4.2.2).

Tables 24 – 26 contain the focused coding for 1, 2, and 3 for the social domain of cooperation.

Table 24: Focused Coding Number 1 of Cooperation

Focused coding 1	
Create shared experiences Create shared experiences and celebrate joint successes so that business and personal interests overlap and a personal relationship with the customer can be established.	
Salespeople: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 17, 18 Customer: 1, 2, 3, 4	Address similarities such as family, hobbies, holidays and leisure, talk about personal experiences/celebrate joint business successes
The following quotes illustrate how salespeople attempt to create shared experiences with their customers (salespeople left/customers right):	
"Personal relationships are key in long-term projects in the industrial goods business... [A personal relationship] can only be achieved through joint work and the time that you spend on a project together." (Salesperson 13) *"Create joint experiences and similarities. Try to create advantages for the customer by perhaps organising a news article or a talk for the customer... or simply just do it the traditional way and go out for a meal together." (Salesperson 18)*	*"Personal relationships always arise based on business which has been done together, or based on a [technical] problem which has been solved together, or on negotiations from which a consensus was found." (Customer 2)* *"Salespeople always try to build up personal relationships, but some of them put such little effort into doing so. They discuss nonsense topics which don't interest me." (Customer 4)*

Source: Author

Create shared experiences was mentioned by sixteen of the salespeople and four of the customers. They do it by addressing common ground such as family, hobbies, holidays and leisure, and talking about personal experiences.

Table 25: Focused Coding Number 2 of Cooperation

Focused coding 2	
Renunciation of self-interest Renounce self-interest and try to solve the customer's problems so that he views this as an advantage, and a win-win situation can be generated.	
Salespeople: 1, 6, 8, 9, 12, 15, 17, 18 Customer: 1, 2, 4	Solve the customer's problems and keep their promises/not openly address their own personal interests
The following quotes illustrate how salespeople attempt to renounce their self-interest (salespeople left/customers right):	
"[Personal relationships] arise after the first joint successes. In many cases, I can solve the customer's problems. The relationship is then established on these	*"I have been in meetings in which I was under a lot of pressure and the salespeople also noticed that. However, no one has ever been brave enough to question me more*

joint successes." (Salesperson 15) "*Promises need to be kept and problems discussed immediately. Otherwise, you need to make contact with the customer straight away. Communication is crucial.*" (Salesperson 17)	*closely in this regard. They always just sit there and listen.*" (Customer 1) "*Very few are intuitive enough to engage with that because they are so busy with themselves and the questions they have to ask. If they were to put this aside, I would be more likely to give them an opportunity to address their points* (Customer 4)

Source: Author

Renunciation of self-interest was highlighted by eight of the salespeople and three of the customers. The participants do it by solving the customer's problems and celebrating joint successes.

Table 26: Focused Coding Number 3 of Cooperation

Focused coding 3	
Empathise with the customer Empathise with the customer and consider his situation so the customer's state can be cognitively recognised and understood.	
Salespeople: 1, 2, 3, 4, 6, 9, 10, 11, 13, 14, 16, 17, 18 Customer: 1, 2, 3	Discuss the mood by directly addressing the situation/finding out what the customer needs in this situation
The following quotes illustrate how salespeople attempt to empathise with the customer (salespeople left/customers right):	
"*If I want to give the customer a better understanding of something, I naturally have to put myself into his shoes. I then ask myself what he would actually need in this situation.*" (Salesperson 3) "*I make a conscious effort to put myself into his shoes. I ask him openly how he is.*" (Salesperson 9)	"*It is extremely difficult to live through such a situation yourself or to make an impact on it where you don't actually have any information. It helps to address it directly or to set up the next meeting in such situations.*" (Customer 2) "*Salespeople have already tried to pick up on how I am feeling. [They] have tried to find out what sort of situation I am in.*" (Customer 3)

Source: Author

Thirteen of the salespeople and three of the customers consider that it is important to empathise with the customer. These salespeople try to put themselves into the customer's situation and discuss his mood by directly addressing the situation. Furthermore, they ask themselves what the customer needs in this situation.

7.2.2.1 Seek Personal Contact

Table 27 below presents the findings of Question nine on how often salespeople seek personal contact with their customers.

Table 27: Seek Personal Contact

Category cooperation		
Seek personal contact to the customer		
Salespeople: 1, 2, 3, 5, 6, 9, 11, 16, 18	Customer: 0	always
Salespeople: 7, 8, 10, 12, 14, 15, 17	Customer: 1, 3, 4	often
Salespeople: 4, 13	Customer: 2	sometimes
The following quotes illustrate why salespeople are not always able to seek personal contact with the customer (salespeople left/customer right):		
"Obviously, I don't just jump right into the offer and the price discussion... it is important to work out what you have in common." (Salesperson 1) *"We really need to meet for few joint meetings until [a personal relationship] appears. With time, there is an overlap of personal and business interests." (Salesperson 14)* *"At the end of a project, [a personal relationship] has usually resulted as a matter of course." (Salesperson 15)*	*"It's always cultural in nature. You must show a certain level of restraint in such personal contact... Sometimes it is the same hobby that helps you to get to know the customer on a personal level." (Customer 2)*	

Source: Author

Table 27 shows that nine of the salespeople always seek personal contact. Seven salespeople and three customers mention that salespeople often seek personal contact. Two salespeople and one customer say that salespeople only seek personal contact sometimes.

7.2.2.2 Recognise Customer's Situation

Table 28 below presents the findings of Question ten on how often salespeople recognise the customer's mental situation.

Table 28: Perceive Mental Situation

Category cooperation		
Perceive the customer's mental situation		
Salespeople: 3, 6, 8, 10, 11, 14,	Customer: 0	always

Salespeople: 1, 2, 4, 7, 9, 17, 18	Customer: 0	often
Salespeople: 15	Customer: 2	sometimes
Salespeople: 5, 12, 16	Customer: 3, 4	rarely
Salespeople: 13	Customer: 1	never

The following quotes illustrate why salespeople are not always able to perceive the customer's mental state (salespeople left/customer right):

"It always depends on the situation and at what stage the relationship is. In the first meeting, certainly not; in a further meeting, most likely." (Salesperson 9) *"Yes, that's one of my strengths. I let the customers talk and try to put myself into their difficult situation. Often several negative things, rather than just one, come together." (Salesperson 10)* *"If the customer says that something is wrong, then I try to put myself into the situation and imagine what that could mean for him. I can only influence what the customer is telling me, not anything else." (Salesperson 16)*	*"This is certainly done in the industrial goods sector. Sometimes it's then quite difficult to perceive the mental state of a person, especially if the relationship is still relatively young; maximum restraint is required." (Customer 2)*

Source: Author

Table 28 shows that the customer's mental situation can only be perceived if the customer allows this. Some of the salespeople found it difficult to say whether they perceived the customer's mental situation because until now they had never consciously considered this to be a relevant aspect in a long-term salesperson-customer relationship. Though salespeople try to put themselves into the customer's position, it is nearly impossible to experience the customer's mental situation at the beginning of a relationship. Instead, the salespeople try to put themselves into the current situation of the customer. The subsequent discussion of the findings of Section 7.2.2 and the responses of the senior executive sales personnel and the high-level customers will be explored in greater depth in Section 7.2.2.3.

7.2.2.3   Building the Conceptual Framework: Adding the Domain of Cooperation

This section will discuss the findings for the social domain of cooperation and their relevance in recognising the customers' personal interests and mental situation. The social domain of cooperation encompasses the three concepts of *creating shared experiences*, *renouncing self-interest* and *empathising with customers*. These concepts have the potential to produce interpersonal reward situations within a customer's brain that may lead to the development and maintenance of a long-term salesperson-customer relationship (Figure 18). The findings for seeking personal contact (Section 7.2.2.1) and recognising the customer's situation

(Section 7.2.2.2) are integrated into the second layer of the following figure and discussed further in Section 7.2.2.4.

Figure 18: Elaborated Conceptual Framework for Cooperation
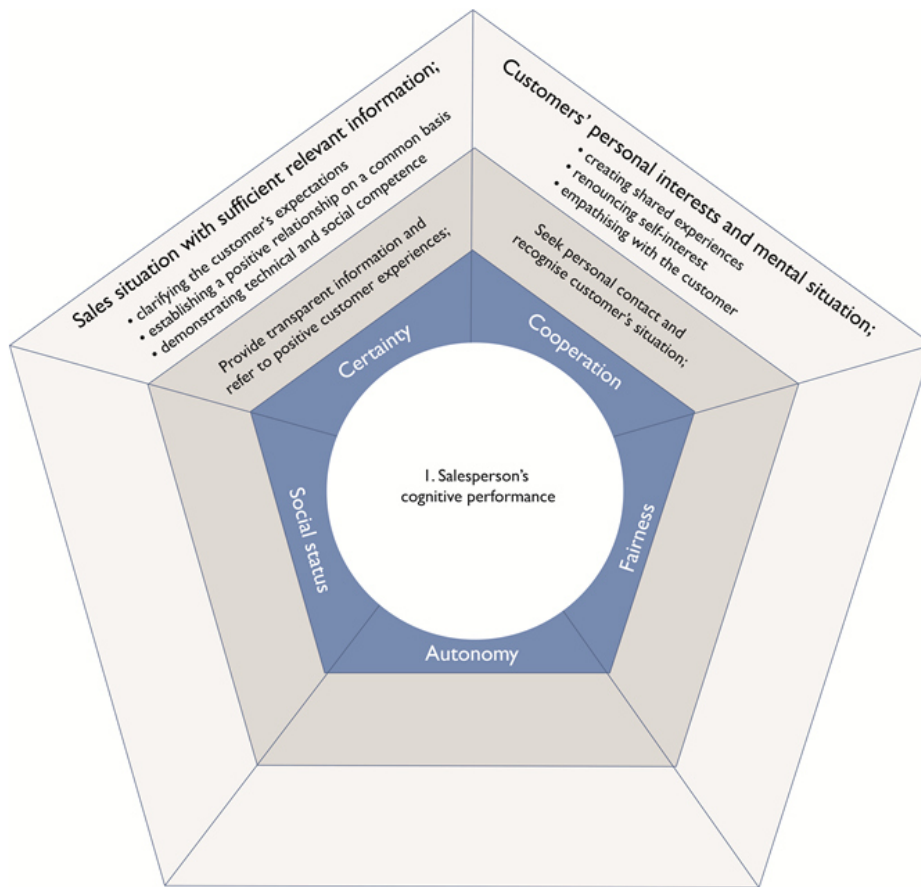
Source: Author

The findings for the social domain of cooperation show that the focus of cooperation is mainly to build up a personal relationship between the interacting salesperson and customer which could develop into a long-term relationship. During this phase, the salesperson must have in-depth consulting knowledge about his complex and customised products and services and realise that the collaboration is not finished when a sale is completed. The collaboration continues and the salesperson often remains a person of trust for the customer.

The findings confirm that the salesperson's and the customer's business interests are the drivers for the collaboration work between the two parties. During their information exchange, fact-based business matters are discussed and personal experiences are recounted. During these collaboration phases, it is important that the salespeople *create shared experiences*, *renounce self-interest* and *empathise with customers*.

The findings clearly demonstrate that technical details in particular are usually discussed in depth with customers. Yet, it is more important to reach a consensus and decide on a common direction for the project. Furthermore, the findings reveal that relatedness results

from the initial joint successes, and that a long-term salesperson-customer relationship is based on solving the customer's problems. These common successes create shared experiences which satisfy the customer and ultimately create revenue for the salesperson and his company through customer purchases or repurchases. This is in line with Palmatier (2008) and O'Connell et al. (2011). These three concepts show that a personal relationship is established with a customer at a later stage and results from joint negotiation, joint implementation and commissioning of the complex and customised products or services.

Based on the findings from the interviews, the salesperson tries to find similarities, such as family, hobbies, holidays and leisure, and talks in many cases about personal experiences and personal stories in front of the customer. This is in line with what Palmatier et al. (2006) highlighted in terms of similarities between the relationship partners. They found that the dyadic determinants such as communication and similarity positively affect the quality of the relationship between a salesperson and his customer. However, it seems to be in contrast to the type of similarities that other authors view as crucial for the positive influence on the relationship quality. For example, Beatson et al. (2008) pointed out that only similar behaviours are crucial.

In situations of creating shared experiences, the concept of renouncing self-interests when solving the customer's problems plays a central role. The findings show that once the deal has been successfully concluded, the personal aspect of the relationship between the salesperson and the customer can be further enhanced by activities outside of the direct scope to the deal, such as for example having lunch together. However, it is essential that the salesperson tries to solve the customer's problems and keeps his promises towards the customer. Furthermore, the findings indicate that salespeople should not openly address their own personal interests during their interaction with the customers because this behaviour would be viewed as competitive and not cooperative. Cooperative behaviour potentially results in a reward situation, while non-cooperative behaviour results more often in threat situations (Frith & Singer, 2008). Researchers such as Decety et al. (2004) argue that cooperation addresses the reward region which is associated with neural activity of the automatic social cognition system.

The findings show that the concept of empathising with the customer throughout the salesperson-customer relationship greatly increases the chances that future actions and expectations can be met. However, the findings confirm that the salesperson is only able to do this if he understands on how to collaborate and if he can empathise with the customer. This is in line with the discussion in Section 2.2.5 in terms of understanding the salesperson's cognitive performance and what kind of effects this can have in the customer's brain. The findings on empathetic behaviour confirm that the concept of empathy can be implemented when the salesperson directly addresses the customer's mood in specific situations and tries to find out what the customer needs in this situation. This is comparable with what the literature suggests, i.e., that mirror neurons could be responsible for empathic behaviour and why this results in relatedness (Iacoboni, 2009) between the salesperson and the customer. The three concepts of cooperation show why cooperation can be viewed as a type of relatedness. Relatedness was already seen as an important factor in interactions by Decety

et al. (2004). The findings further complement those of researchers such as Gordon (1986), who argued that by acting cooperatively while at the same time trying to empathise with the emotional situation and the experiences of the customer may result in relatedness.

7.2.2.4 Synthesising the Empirical Findings with the Literature for the Social Domain of Cooperation

This section will synthesis the empirical findings with the literature for the social domain of cooperation. In reflecting on the concepts of the social domain of cooperation, *creating shared experiences, renouncing self-interest* and *empathising with customers* attempt to produce interpersonal reward situations within a customer's brain that may lead to the development of a long-term salesperson-customer relationship.

While applying these concepts, a salesperson seems to generate interpersonal reward situations in the customer's brain with his cognitive performance (Section 2.2.5) because he is attempting to establish and develop a personal relationship with the customer and perceive the customer's mental situation. Furthermore, by doing so, there are some neuroscientific indications that this generates a higher positive activation in the customer's brain and the automatic social cognition system seems to be addressed, which then potentially creates a conscious desire in the controlled social cognition system. These concepts underlying the social domain of cooperation result in cooperative behaviour and then in possible rewarding situations. This is fully in line with what Frith and Singer (2008) proposed in their study about decision-making.

Social cognitive neuroscience explains what kind of processes take place in the brain while a salesperson applies the three emerging concepts of cooperation. The concepts of the social domain of cooperation unconsciously seem to activate the human reward process. If they are not applied by a salesperson, a potential threat situation in the brain of the customer can occur and the relationship could be immediately viewed as terminated. This is because non-cooperative behaviour results in threat situations more often than not (Carter & Pelphrey, 2008; Frith & Singer, 2008).

However, there is additional evidence (Section 7.2.2.1) which shows why the salesperson cannot always seek personal contact and try to recognise the customer's mental situation (Section 7.2.2.2). Interview participants who fail to perceive the customer's mental situation argue on the one hand that they are unable to experience it in exactly the same way as the customer does. On the other hand, these participants are also not aware of the concepts which have the potential to produce reward situations in the customer's brain under certain circumstances. The reality is that salespeople must apply these concepts if they want to develop a personal relationship with their customers (de Vignemont & Singer, 2006) which ideally evolves into a long-term salesperson-customer relationship at a later date and may generate intentions to purchase and repurchase as well as to build up loyalty and positive WOM (O'Connell et al., 2011; Palmatier, 2008).

7.2.3 Social Domain of Fairness

This section will present the findings for the social domain of fairness, which was introduced in Section 4.2.3. This social domain investigates how salespeople ensure that the customer is treated in a just and honest manner.

The findings of the social domain of fairness show that customers expect to be treated in a just and honest manner when receiving technical and economic information in the high-technology B2B sector. This means if the customer feels he is treated fairly, the salespeople can expect the same. The answers of the salespeople and customers show that they see reciprocity as a fundamental principle of human action in the high-technology B2B sector. This is in line with Ninness (2008), who argued that the recipient feels committed to give something back which is comparable in value if his counterpart treats him fairly. An example from Salesperson 1 supports this:

> *"Honest and fair treatment also means that you are dependent on there being fairness on both sides. I try to make it clear that fairness on one side triggers mutual fairness. It really doesn't work if it's a one-way street, even if the customer would like me to be generous to him and not to have to reciprocate. But that's the way the customer sees it. That's not what he understands as fairness. It's based on a certain reciprocity. I also often speak openly to the customer and tell him that I'm prepared to deliver him a good system and a good service, and that I will act fairly and with integrity in every regard; however, that has its price." (Salesperson 1)*

For salespeople, it is obvious that the customer must be treated well even if this is not reciprocated. In relation to this, Petermann (2013) argued that reciprocity has no rational character. It consists mainly of the principle of hope, which refers to something along the lines of actions carried out in the hope that one of the partners met will do the same in the end. During the interviews, it became clear that salespeople often address these expectations when talking the customer. They often mentioned the need to openly communicate positive and negative facts; otherwise, this may have a negative impact on the relationship with the customer.

> *"Discuss both negative and positive facts openly. There is no point in keeping things secret. Sometimes there are even tactics to sell things which don't actually exist. The application engineer first needs to design this product. In a high position such as mine, I need to be brutally honest with our customers. People in a lower position can sometimes still gloss over things slightly. (Salesperson 5)*
>
> *"It's important to always tell the customer the truth. Don't try and sell by being untruthful because these untruths will later come to light and paint me as a salesperson in an extremely negative light." (Salesperson 6)*

It is important that the salesperson is truthful with the customer. His main task is to connect with the customer, ask him about the goal, and then to propose a common path to achieve the goal.

"The goal of a sales process is actually mutual agreement on a common goal which is approached from different angles. However, if you see that it is unachievable, you mustn't even try to somehow force it." (Salesperson 14)

At the same time, it is appropriate to mutually agree on a goal or to give the customer the feeling that a potential solution came from him alone.

"And by developing solutions together, when a solution arises from this cooperation, the customer always has the feeling that it was his idea. He can't implement his idea alone, but I help him do it." (Salesperson 3)

In many cases, salespeople do not know the customer's processes. That makes it difficult to provide final confirmation of the system's performance and how the system will behave once it is incorporated into the customer's process.

"Often we don't know the customer's process. However, in order to align our system with it, we have to know a lot about the process. And for me it's most difficult on a personal level as I cannot give him a guarantee that the system will function in his processes in the way that he foresees. I simply don't have any idea in which environment the customer will use the system. We can guarantee our performance; however, we can't guarantee that his process will then work. It isn't always easy to get that across. Depending on who is sitting opposite you, the customer either understands this, or he doesn't. The most difficult meetings are those with people who are salespeople through and through. Your opposite number needs to have technical knowledge. However, this may be openly ignored on occasion." (Salesperson 5)

Therefore, the customer's needs must be continually weighed up. Flexibility is required on both the salesperson's and the customer's side.

"Expectations always need to be the same on both sides. Are they still the same, or does the process need to be changed as well." (Salesperson 6)

If the customer's expectations are queried again, the sales process in the industrial goods sector can be long-winded.

"I'm usually sure from the start that a problem can be resolved. I just need to get the possible solutions across to the customer in the right way. That usually takes some time." (Salesperson 15)

Table 29 below summarises the empirical findings of the social domain of fairness. These findings contribute to the finalised conceptual framework (Section 7.3) by illustrating how to ensure that the customer is treated in a just and honest manner. These findings represent the third of the five parts of the finalised conceptual framework, which shows a way to create a window into the black box of the customer's mind in the development and maintenance of a long-term salesperson-customer relationship.

Table 29: Findings for Fairness

Category	Treating customers in a just and honest manner.
Fairness	How to ensure that the customer is treated in a just and honest manner and how to ensure that the customer's expectations are met.
Focused coding	
1	Keep promises to the customer
2	Behave generously with customers
3	Ensuring customer satisfaction

Topic for fairness
The social domain of fairness encompasses the concepts of keeping promises to customers, behaving generously with customers and ensuring customer satisfaction.

Source: Author

Table 29 provides a summary of how the salespeople ensure that the customer is treated in a just and honest manner and that the customer's expectations are met. According to the neuroscientific literature discussed in Section 4.2.3, interpersonal reward situations are produced in the customer's brain when the salesperson ensures that the customer is treated in a just and honest manner and ensures that the customer's expectations are met.

Tables 30 – 32 contain the focused coding for 1, 2, and 3 for the social domain of fairness.

Table 30: Focused Coding Number 1 of Fairness

Focused coding 1	
Keep promises to the customer Make no promises which cannot be met, which means the arrangements can be maintained on both sides.	
Salespeople: 1, 2, 5, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18 Customer: 1, 2, 3, 4	Make no promises regarding system specifications and milestones which cannot be kept/treat all customers the same way and harbour no prejudices
The following quotes illustrate how salespeople attempt to keep their promises to the customer (salespeople left/customers right):	
"I only make promises that I can keep. We also never exploit the customer if he is in an emergency situation." (Salesperson 12) *"I try my absolute best to keep a promise. Sometimes things don't work as they should. E.g. in the case of a*	*"In this case, a transparent negotiation policy is particularly crucial. For example, that different customers who know each other are treated the same. Transparent and correct price dealing, no arbitrariness when setting prices and not selling quality that doesn't exist."* (Customer 2)

delivery... if something goes wrong, we always offer some sort of compensation, such as a special discount on the [customer's] next order... the customer must always be happy." (Salesperson 17)	*"Their offers have always been realistic and they have never offered anything they cannot produce. Sometimes there are things which cannot be fulfilled and in this case, it is necessary to communicate clearly." (Customer 3)*

Source: Author

Thirteen of the salespeople and four of the customers believe that it is important to keep one's promises with regard to system specifications and milestones, and to treat all customers the same way. In particular, salespeople should not make promises which they cannot keep. Otherwise, this will have a negative impact on the relationship between the salesperson and customer at a later time in the project.

Table 31: Focused Coding Number 2 of Fairness

Focused coding 2	
Behave generously with customers Be generous and accommodating to customers so that unforeseen difficulties can be solved in an amicable manner.	
Salespeople: 1, 5, 7, 8, 10, 11, 12, 15, 17, 18 Customer: 2, 3	Generous in the form of benefits and values such as special discounts and additional training/enhance goodwill by granting free repairs and complementary services
The following quotes illustrate how salespeople attempt to behave generously with their customers (salespeople left/customers right):	
"Our legal guidelines are adjusted to that. Our policies demand fair behaviour, which we have to make a reality. You need to know the facts and table them. Facts which speak against us need to be addressed and we need to admit them. We need to present a suggestion to reduce any negative facts, goodwill, training or service." (Salesperson 5) *"I am principally generous. If I give [the customer] something, then I would like to have something back in return. It does not need to have the same value, but it must ensure reciprocity." (Salesperson 10)*	*"I think that [the customer is treated fairly] when we are transparent in terms of technical feasibility, but also in terms of costs and margin structure. And again, it is important that a salesperson treats all his customers the same way. Any unfair treatment will be known in the market and spread by different customers." (Customer 2)* *"The sales managers have always tried to offer me what brings us the most benefit. They have never tried to force us into buying anything. They are investment goods and it makes no sense to offer something which is of no use to us." (Customer 3)*

Source: Author

Ten of the salespeople and two of the customers mention the need to behave generously and be accommodating. In general, the interviewed salespeople are generous in the form of services and values such as special discounts and additional training, and they enhance goodwill by granting free repairs and complimentary services.

Focused coding 3
Obtain customer satisfaction

Obtain feedback on customer satisfaction so that a friendship between the salesperson and customer can be developed.

Salespeople: 4, 6, 7, 9, 11, 12, 14, 17, 18 Customer: 1, 4	By monitoring joint arrangements such as system specifications and milestones/proactive behaviour and obtaining repeated customer feedback during the project flow
The following quotes illustrate how salespeople attempt to ensure customer satisfaction (salespeople left/customers right):	
"I always ask the customer whether I have fulfilled his expectations. As the Sales Director, I can do this relatively well and always get an honest answer... I also ask whether the customer is satisfied." (Salesperson 9) *"I clarify the customer's expectations exactly. After that, I prepare an appropriate offer. When it turns into a concrete business transaction, I monitor the project to check that deadlines are adhered to as well as dates which we have jointly agreed. From time to time, I ask questions to check whether they are satisfied and how the project has gone." (Salesperson 12)*	*"It used to be customary to exaggerate and to understate things, but none of the salespeople have ever dared to lie to me. That would have heralded the immediate end of our relationship." (Customer 1)* *"They make an effort and they always try to [ensure that I am satisfied] by fulfilling my expectations." (Customer 4)*

Source: Author

Nine of the salespeople and two of the customers mention the need to obtain customer satisfaction by monitoring common arrangements such as system specifications and milestones as well as proactive behaviour and repetitive feedback gathering during the project.

7.2.3.1 Act in a Just and Honest Manner

Table 33 below focuses on the findings of Question 13 on how often salespeople act in a just and honest manner towards their customers.

Table 33: Act in a Just and Honest Manner

Category fairness		
Act in a just and honest manner towards the customer		
Salespeople: 10, 11, 12, 13, 15, 17, 18	Customer: 0	Always
Salespeople: 1, 3, 4, 5, 6, 7, 8, 9, 14, 16	Customer: 1, 2, 3	Often

Salespeople: 2	Customer: 4	Sometimes
The following quotes illustrate why salespeople are not always able to act in a just and honest manner towards the customer (salespeople left/customer right):		
"That happens anywhere between often and sometimes." (Salesperson 7) *"I act towards/treat the customer in the manner that I myself would also like to be treated."* (Salesperson 10) *"If we didn't meet the [customer's] expectations, then our company wouldn't be around any longer. The goal is always to take an honest approach with the customer."* (Salesperson 12)	*"If this is not the case, the meeting doesn't last long and the salesperson's company and [the salesperson] as our advisor are wrong for us. Flexibility is called for and the suppliers must be ready to tread the same path as us."* (Customer 4)	

Source: Author

Seven salespeople mention that they always act in a just and honest manner towards their customers. Ten salespeople and three customers mention that they do this often; whereas, one of each believed that they only sometimes act in a just and honest manner.

7.2.3.2 Experience Openness on the Side of the Customer

Table 34 below presents the findings of Question 14 on how often the salespeople experience customers openly sharing information.

Table 34: Experience Openness on the Side of the Customer

Category fairness		
Experienced customers openly sharing information		
Salespeople: 10, 18	Customer: 1	always
Salespeople: 1, 2, 3, 4, 6, 7, 8, 9, 11,14, 15, 16, 17	Customer: 2, 4	often
Salespeople: 5, 12, 13	Customer: 3	sometimes
The following quotes illustrate why salespeople do not always experience customers openly sharing information (salespeople left/customer right):		
"Anywhere between often and sometimes. It always depends on the case. I have also had the experience that a customer was open, but that was actually not the case, as I found out later." (Salesperson 7) *"It's always individual. The better I knew the customer, the better it was."* (Salesperson 8) *"At the beginning, I don't feel that the customer is*	*"I truly believe that it is something which exists on both sides. It's always a matter of give and take. If a salesperson doesn't treat you fairly, he can't expect to be treated fairly himself. If you have met on two to three occasions, then you get a sense of whether you are being treated fairly, or not. I think it's something which takes place on a more unconscious level."* (Customer 1)	

| *really open; however, after we've been in touch for a certain period of time, I find him to be very open."* (Salesperson 17) | |

Source: Author

Two of the salespeople and one customer mention that their customers always share information openly. Thirteen of the salespeople and two of the customers often have this experience, while three of the salespeople and one customer experience it sometimes. The subsequent discussion on the findings of Section 7.2.3 and the responses of the senior executive sales personnel and the high-level customers will be discussed in greater depth in Section 7.2.3.3.

7.2.3.3   Building the Conceptual Framework: Adding the Domain of Fairness

This section will discuss the findings for the social domain of fairness and their relevance in treating customers in a just and honest manner. The social domain of fairness encompasses the three concepts of *keeping promises to customers, behaving generously with customers* and *ensuring customer satisfaction* (Figure 19).

Figure 19: Elaborated Conceptual Framework for Fairness
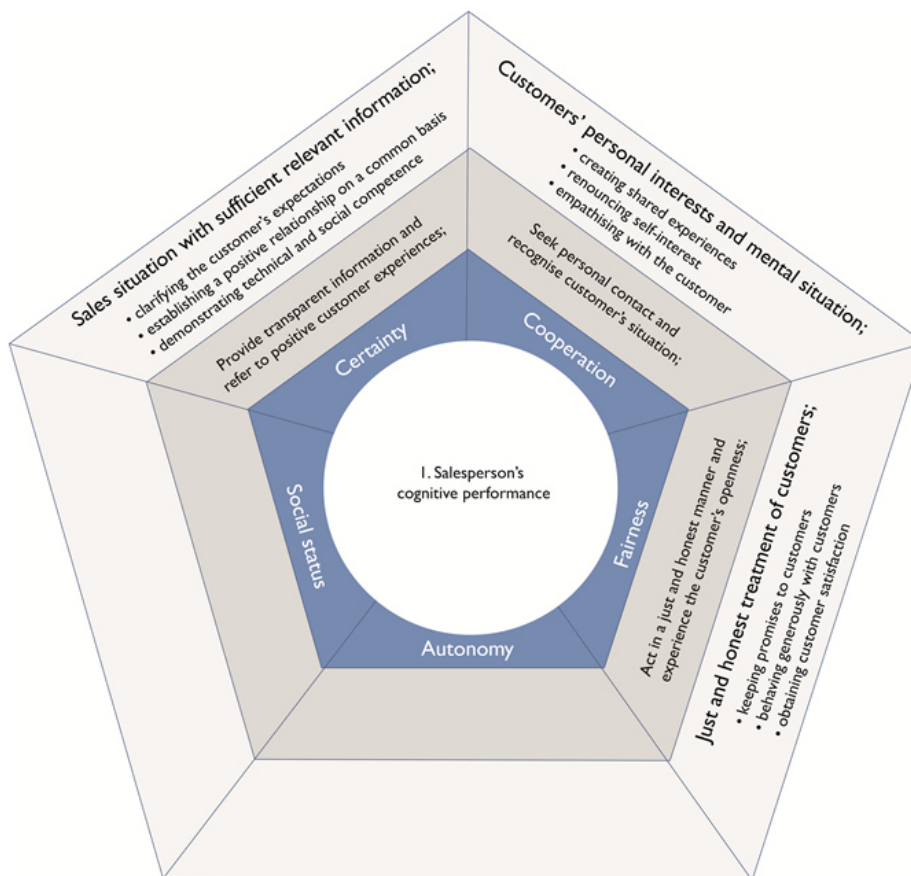
Source: Author

These concepts have the potential to produce interpersonal reward situations within a customer's brain that may lead to the development and maintenance of a long-term salesperson-customer relationship. The findings for acting in a just and honest manner (Section 7.2.3.1) and experiencing openness on the side of the customer (Section 7.2.3.2) are integrated into the second layer of the following figure and discussed further in Section 7.2.3.4.

The findings for the social domain of fairness demonstrate that a mutual honest attitude is of paramount importance in the development and maintenance of a long-term salesperson-customer relationship. It is vital that the salesperson is honest and shows integrity throughout the whole sales process. Furthermore, the findings highlight the fact that fairness comes to the fore in particular, especially when technical promises should be kept or commitments regarding delivery times of a complex and customised product or service are made earlier. The findings confirm that the salesperson's generosity, goodwill and his proactive behaviour are most beneficial for the relationship during this phase. This fairness phase is particularly important when the first uncertain phase is over and when salesperson and customer have developed a project together. Therefore, the findings provide evidence that during this phase of a relationship, it is important that the salespeople adhere the concepts of *keeping promises to customers, behaving generously with customers* and *ensuring customer satisfaction*.

The findings confirm that salespeople employ fair practices in their dealings with customers; however, this begins much earlier and not only upon submitting an offer. Fair practices mean not making promises regarding system specification and milestones which cannot be kept. Furthermore, fairness means that all customers are treated the same way. This is in line with Ghazy and Turki (2014), who state that is vital to keep individual customer promises. However, this study adds to the point that all customer's promises must be kept in the same way. The findings for the social domain of fairness, on the one hand, reflect that promises are necessary and essential to keep the customer satisfied (Zhang, Viswanathan, & Henke, 2011). On the other hand, they echo the findings from the interviews, which show that salespeople try to put into practice the concept of keeping promises to the customers by making no unrealistic promises.

While it is clear that a salesperson must keep his promises to customers, the concept of behaving generously with customers plays another important role in the sales process. The findings show that a salesperson can have a considerable influence by mentioning the customer in a positive light to other parties within the customer's organisation. According to the interviewees, positive feedback is important and can lead to friendship. It also makes it easier to solve unforeseen difficulties. Difficulties should be solved in a friendly and efficient manner during the various phases of the sales process. The findings highlight that a transparent negotiation policy plays a key role during these phases: only offer solutions that correspond to the customer's needs. However, in order to do so, the findings show that salespeople must have a good knowledge of the customer's needs. Furthermore, salespeople are generous in the form of benefits and values such as special discounts and additional training. In addition to that, salespeople enhance goodwill by granting free repairs and

complimentary services in their offerings to their customers. This findings are in line with those of Tax and Brown (1998), who argued that long-term relationships result from a high-quality relationship. They believed that the longevity of a successful relationship must be maintained with whatever kind of goodwill that is necessary.

The findings indicate further that salespeople generally do not refer to fair or unfair treatment of customers. Rather, salespeople refer to customer satisfaction (Section 3.3.1.3). However, since satisfaction is a relatively unstable emotional state (Reichheld et al., 2000), this state may change within a short amount of time. The findings show that this in turn means that the salesperson must obtain customer satisfaction recurrently. In this context, consistent with the findings, the customer may well be asked whether he feels that he is being treated fairly because fairness represents a nonmaterial social factor and addresses the automatic social cognition system (Tabibnia & Lieberman, 2007). Therefore, fairness activates the human reward system, which has the potential to lead to a satisfying situation and thus, to a interpersonal reward situation (Carter, 2009). Even though satisfaction is an unstable emotional state, it defines the important ratio between the quality which the customer expects to receive and that which he actually receives from a salesperson (Spreng, MacKenzie, & Olshavsky, 1996). The findings show that the salesperson must demonstrate a just and honest mindset to ensure a satisfying relationship with the customer. However, researchers such as Bowden (2009) have not yet agreed on whether satisfaction is only important at the beginning of a customer relationship or also in the further course of the relationship. The findings clearly demonstrate that due to the short-term nature of satisfaction and the fact that the customer's expectations are always increasing, a salesperson should ensure that a habituation effect does not occur. This is exactly in line with what Santos and Boote (2003) state in their model of consumer expectations.

7.2.3.4 Synthesising the Empirical Findings with the Literature for the Social Domain of Fairness

This section will synthesis the empirical findings with the literature for the social domain of fairness. In reflecting on the concepts of the social domain of fairness, *keeping promises to customers, behaving generously with customers* and *ensuring customer satisfaction* attempt to produce interpersonal reward situations within a customer's brain that may lead to the development of a long-term salesperson-customer relationship.

The salesperson's cognitive performance discussed in Section 2.2.5 has the potential to activate the human reward system with the concepts emerging from the social domain of fairness. This is because fair behaviour activates the human reward system (Crockett et al., 2008). This means that a salesperson tries to meet the customer's expectations to be treated fairly by keeping his promises, behaving generously and obtaining customer satisfaction. Interestingly, situations involving perceived unfairness result in a higher level of rejection (Crockett et al., 2008). If this does not happen, he can be viewed as putting his relationship with the customer under critical pressure, which would have a negative impact on the quality of the relationship (Section 3.3.1). Thus, fair behaviour seems to produce

interpersonal reward situations in the customer's brain under certain circumstances, which is in line with the investigations undertaken by Crockett et al. (2013).

Social cognitive neuroscience could potentially explain where these fairness concepts generate activity in the brain (Section 4.2.3). As mentioned earlier, these concepts seem to have a rewarding character when they are understood and applied by the salesperson. If they are ignored and their importance is not sufficiently respected, there is neuroscientific evidence that threating situations may arise in the customer's brain and potentially result in the termination of the relationship between the salesperson and customer without the completion of a potential sales deal. Therefore, a salesperson should behave in a just and honest manner and meet the customer's expectations that he will be treated fairly. This will result in a state of emotional awareness, openness to new ideas as well as an increase in the willingness to establish a connection with other people (Decety et al., 2004).

Additional findings from Section 7.2.3.1 show that salespeople cannot always be just and honest in their dealings with customers because there are situations where the salesperson cannot make promises, be generous or obtain satisfaction. The findings show that this is because of the technological uncertainty, market uncertainty, competitive volatility. This is in line with what Sharma et al. (2008) and Mohr et al. (2010) highlighted in their study about high-technology business. Thus, it is evident that salespeople may sometimes find themselves in a challenging situation when dealing with the customer. This is in line with the findings of Ingram et al. (2008), who state that salespeople need a level of high self-efficacy if their initial efforts meet with resistance, rejection, or failure.

There is further evidence from Section 7.2.3.2 which shows why salespeople do not always experience openness on the customer's side in sharing information. The participants believe that this exists on both the salesperson's and the customer's side. However, they agree that the longer they know each other and the more shared experiences they create (Section 7.2.2), the more open both parties are in sharing information and the more integrity exists between them. This is consistent with Peters et al. (1997), who investigated the perceptions of honesty and openness as predictors of integrity and therefore, the longevity of a salesperson-customer relationship. This in turn may lead to intentions to purchase, to repurchase and positive WOM.

7.2.4   Social Domain of Autonomy

This section will present the findings for the social domain of autonomy, which was introduced in Section 4.2.4. This social domain investigates how salespeople give the customer the perception of control and of having choices.

This social domain demonstrates that the customer's freedom to choose in the high-technology B2B business environment is not unlimited, but it depends on his view of various internal and external factors. Two of the most important factors are his existing budget and decision-making competence.

"I give [the customer] as much freedom as possible and always ensure that I give him a variety of solutions. It is also a budget issue; do they have the money, or not. I have to base what I do on that. That may limit the customer's freedom of choice. However, he should be able to freely decide… A further problem is that the customer must have the expertise to weigh up the options and assess them." (Salesperson1)

The freedom to make decisions is therefore not unlimited, but is determined by certain factors. Within this scope, however, the customer should have the freedom to decide. The salespeople and customers who participated in the interviews think the personal relationship would end if the customer did not have the freedom to decide whether to purchase, or not.

"If this involves a significant decision, this must of course be made by the customer. As a salesperson, I also attempt to always put the ball in the customer's court. There are often several parties involved. In this case [I] must always be careful that [I] do not undermine the [customer's] expertise or take away any of his decision-making competence. That would be the worst thing I could ever do…" (Salesperson 5)

If the personal relationship with the customer is to be maintained and further developed, it is important to allow the customer the freedom to decide. However, successful salespeople usually do their homework in advance and talk with some of the involved parties beforehand. This allows the former to decide on and arrange a preliminary plan in advance.

"I generally already have a plan in mind for myself. I speak with the people [involved] in the run-up and I know what they want. I prepare myself in this regard and would never sell the customer anything that he could not use." (Salesperson 18)

Therefore, salespeople can be well prepared beforehand if they have an initial meeting with the decision-makers on the customer side.

"In the background, I naturally attempt to ensure that [the customer] can do as he wishes. This works best when he is convinced that the solution was his idea. I am sure that it would not work if I tried to force the customer to do something. He has to have the feeling that it was his decision. That's very important." (Salesperson 3)

Thus, the control behaviour of salespeople goes in this direction, i.e. along the lines of whatever he has already prepared. However, it is paramount for the salespeople that the personal relationship as well as the mutual trust between himself and the customer is the focus.

"My control goes in my preferred direction. I also give [the customer] more information as to why I think that is good, and I tend to give less for the other solution. I give him arguments so that he can also work towards a solution in his company internally. The benefit needs to be a given… I prefer to lose money than

the trust which I have built up in the customer. A certain solution may offer me a possible strategic advantage; however, I cannot countenance the thought of the customer being disadvantaged as a result. My conscience would not allow me to do such a thing." (Salesperson 10)

This sales procedure is just what the customers expect. A customer expects two to three potential solutions for his problems. The salesperson normally has to propose these solutions. He is then also periodically in charge to control the various phases during the sale process.

"The ones who have listened and know where our problems lie, they make suggestions. They make several suggestions when they recognise that we want to work together with them. These suggestions then also need to be checked during the purchase process." (Customer 4)

Table 35 below summarises the empirical findings of the social domain of autonomy. These findings contribute to the finalised conceptual framework (Section 7.3) by illustrating how salespeople allow the customer the perception of control and of having choices. These findings represent the fourth of five parts of the finalised conceptual framework, which shows a way to create a window into the black box of the customer's mind in the development and maintenance of a long-term salesperson-customer relationship.

Table 35: Findings for Autonomy

Category	Allowing the customer the perception of control and of having choices.
Autonomy	How does the salesperson give the customer the freedom to decide and how does he use control behaviour so that the customer feels as though the decision is his alone?
Focused coding	
1	Offer feasible choices
2	Present pros and cons
3	Apply control behaviour

Topic for autonomy
The social domain of autonomy encompasses the concepts of <u>offering feasible choices</u>, <u>presenting the pros and cons</u> and <u>applying adequate control behaviour</u>.

Source: Author

Table 35 presents the findings for the category of autonomy, respectively, of giving the customer the perception of control and of having choices during the decision-making process. Neuroscientific research shows us that interpersonal reward situations are produced in the customer's brain when the salesperson gives the customer the freedom to

decide and uses control behaviour so that the customer feels as though the decision is his alone (Section 4.2.4).

Tables 36 – 38 show the focused coding for 1, 2, and 3 for the social domain of autonomy.

Table 36: Focused Coding Number 1 of Autonomy

Focused coding 1	
Offer feasible choices Offer the customer feasible choices and alternatives so that he has can make his own decision.	
Salespeople: 1, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18 Customer: 1, 2, 3, 4	Present a range of different solutions for a customer's problem/present different quotes or at least three options within a quote
The following quotes illustrate how salespeople attempt to offer feasible choices to a customer (salespeople left/customers right):	
"I have already tried to exert a certain influence over the customer's decision-making... I always show [the customer] alternatives and explain them to him. They then make their decision based on these explanations." (Salesperson 8) *"I give [the customer] as many tools and as much information as possible so that we initially have a discussion basis and then a decision-making basis. I do not make decisions for the customer; however, I make him aware of the advantages and disadvantages, and help him to make his own decisions."* (Salesperson 10)	*"A selection is always necessary and there always needs to be an open decision, without preference being shown by the salesperson."* (Customer 2) *"The sales managers generally let me make decisions. They make suggestions and offer options – that is what the clever ones do in particular – they mostly let me decide."* (Customer 4)

Source: Author

Thirteen of the salespeople and four of the customers think it is important to offer feasible choices by presenting a range of different solutions to a problem along with different quotes or different options within a quote.

Table 37: Focused Coding Number 2 of Autonomy

Focused coding 2	
Present pros and cons Present the advantages and disadvantages of the choices and submit a proposal so that the customer can decide within his range of competencies and budget.	
Salespeople: 1, 2, 7, 8, 9, 10, 12, 14, 15, 16, 17 Customer: 1, 2, 3	Mention the advantages and disadvantages of the selected solution to a problem/highlight the advantages of the chosen product and stress the disadvantages of the competing product

The following quotes illustrate how salespeople attempt to present pros and cons to a customer (salespeople left/customers right):	
"It is certainly important that the customer makes his own decisions. I provide him with alternatives and [their] advantages and disadvantages, and then he can make a decision himself. Sometimes, I highlight certain advantages over others if I prefer a particular solution." (Salesperson 7) *"I signal to the customer that it was actually his decision. I do that by summarising the points we have discussed every 10 minutes. I then focus on the aspects which should be favoured. They either object then or everyone is on the same page."* (Salesperson 16)	*"Salespeople have always tried to influence my decision. In every case with all the options, such as focusing on advantages; they often single out the disadvantages of [a competitor's products]. They don't place them in a bad light, but rather discuss the disadvantages. This definitely had an effect on my decision. Not the decision itself, but rather what led me to make the decision."* (Customer 1) *"Good sales managers always give me different options to select from. These must always be justified in terms of risk, price, relevant criteria, and the benefits must be clearly pointed out."* (Customer 3)

Source: Author

Eleven of the salespeople and three of the customers say that they present the advantages and disadvantages of the choices and submit a proposal so that the customer can decide within his competence and budget. In more specific terms, salespeople mention the advantages and disadvantages of the selected solution to a problem, highlight the advantages of their own products and services, and stress the disadvantages of the competing products.

Table 38: Focused Coding Number 3 of Autonomy

Focused coding 3	
Apply control behaviour While the customer is deciding on a solution, apply the control behaviour in such a way that the customer gets the feeling that it was his decision alone.	
Salespeople: 1, 3, 4, 6, 7, 8, 10, 11, 12, 14, 15 Customer: 1, 3	Do not force the customer to choose a particular solution, rather highlight the favoured solution with technical facts/apply the control in this way so that the customer always has the feeling that the solution to a problem has been his alone.
The following quotes illustrate how salespeople attempt to apply the control behaviour (salespeople left/customers right):	
"I constantly check the costs and that the budget is being adhered to. And then, when at all possible, [I] check that the applications are implemented as the customer has specified." (Salesperson 1) *"In many cases, I deliver the fundamentals [of the system] to the customer so that he can make his decision. That represents a type of control behaviour."* (Salesperson 6)	*"[The salespeople] try to control the sales process with traditional factors: product description, price, service and output which are hidden behind this; the resulting advantages over the course of the running time and the entire range of benefits."* (Customer 1) *"Salespeople have always tried to keep in regular contact to check where I am in the procurement process."* (Customer 3)

Source: Author

Eleven of the salespeople and two of the customers say they apply control behaviour by not forcing the customer to choose a solution. Hence, this seems to be an important practice in selling high-technology products and services within the social domain of autonomy. In this case, salespeople highlight the favoured solution with technical facts and apply the control in this way so that the customer always has the feeling that the solution to a problem has been his own decision.

7.2.4.1 Allowing the Customer the Freedom to Decide

Table 39 below focuses on Question 17 on how often salespeople allow the customers the freedom to decide.

Table 39: Allowing the Customer the Freedom to Decide

Category autonomy		
Allowing the customer the freedom to decide		
Salespeople: 1, 2, 5, 7, 8, 11, 12, 13, 15, 16, 17	Customer: 1, 3, 4	Always
Salespeople: 3, 4, 6, 9, 10, 14, 18	Customer: 0	Often
Salespeople: 0	Customer: 2	Sometimes
The following quotes illustrate why salespeople are not always able to allow the customer the freedom to decide (salespeople left/customer right):		
"I allow the customer the freedom to choose. However, in the process, I try to steer the decision in a certain direction and to lead, but never forcibly. The customers need to think they have defined the product." (Salesperson 4) *"The customer must always have the freedom to make decisions for appearance's sake. Of course, you try to influence them and bring the customer into a situation where he can only make one particular decision."* (Salesperson 5) *"Often, depending on whether I have already tried to influence things."* (Salesperson 10)	*"There are always relevant control criteria within the decision-making process. These must be known. Any variations must be standard-relevant and controllable [by both interacting parties]."* (Customer 2)	

Source: Author

Eleven salespeople and three customers mention that salespeople always allow the customer the freedom to decide. Seven salespeople mention that they do this often; whereas, one customer thinks that salespeople only sometimes allow the customer the freedom to decide.

7.2.4.2 Customer Requesting the Freedom to Decide

Table 40 below focuses on Question 18 on how often the salespeople experience the customer requesting the freedom to decide.

Table 40: Customer Requesting the Freedom to Decide

Category autonomy		
Customer requesting the freedom to decide		
Salespeople: 5, 11, 13, 15, 16	Customer: 1, 2	Always
Salespeople: 1, 6, 9, 10, 14, 18	Customer: 3, 4	Often
Salespeople: 2, 3, 4, 7, 8, 12, 17	Customer: 0	Sometimes
The following quotes illustrate why salespeople do not always experience the customer requesting the freedom to decide (salespeople left/customer right):		
"Unconsciously, customers always want to be helped towards making a decision. It involves a lot of money and when something goes wrong with the decision, things can be very difficult and expensive." (Salesperson 6) *"There are customers who would like to delegate the decision and therewith the responsibility."* (Salesperson 7) *"There have occasionally been situations in which the customer was very happy when I helped him to reach a decision. Primarily when he lacked the requisite technical knowledge. These decisions usually had to do with configuring the system."* (Salesperson 8)	*"In many cases, I need help to decide. In such situations, I then need various suggestions to be able to decide."* (Customer 4)	

Source: Author

Five salespeople and two customers mention that salespeople always allow the customer the freedom to decide. Six salespeople and two customers mention that they do this often; whereas, seven salespeople think that they only sometimes allow the customer the freedom to decide. The subsequent discussion of the findings of Section 7.2.4 and the responses of the senior executive sales personnel and the high-level customers will be discussed in greater depth in Section 7.2.4.3.

7.2.4.3 Building the Conceptual Framework: Adding the Domain of Autonomy

This section will discuss the findings for the social domain of autonomy and their relevance in giving the customer the perception of control and of having choices. The social domain of autonomy encompasses the three concepts of *offering feasible choices, presenting the pros and cons and applying adequate control behaviour*. These concepts have the potential to produce

interpersonal reward situations within a customer's brain that may lead to the development and maintenance of a long-term salesperson-customer relationship (Figure 20). The findings for allowing the customer the freedom to decide (Section 7.2.4.1) and the customer requesting the freedom to decide (Section 7.2.4.2) are integrated into the second layer of the following figure and discussed further in Section 7.2.4.4.
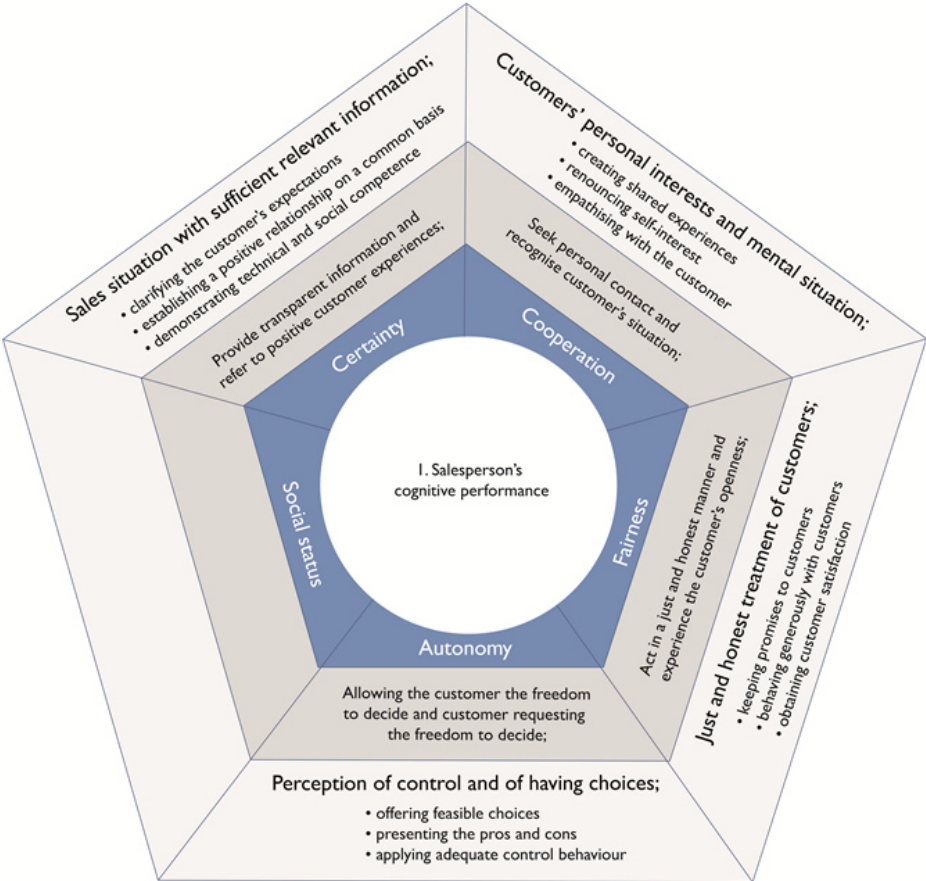
Source: Author

The findings for the social domain of autonomy demonstrate that the phase before submitting an appropriate offer to the tender committee is an essential one in which the salesperson and his cognitive performance can make a positive contribution towards the development of the relationship. This means that a salesperson can no longer influence the outcome of a deal once the final submission of the offer has been made. The results of this social domain show that the time before submission is decisive in the sales process of complex and customised products and service so that the outcome of a deal can be positively influenced. During this phase, it is important that the salespeople *offer the customer feasible choices, present the pros and cons* and *apply adequate control behaviour.*

The findings indicate that there are technological uncertainties which the customer is not able to judge during the entire and partly long-lasting sales process of complex and customised products and services. This is mainly because the seller company is not willing to

disclose how they developed this product or service. Despite this fact, salespeople try to allow the customer the perception of control and of having choices, even if this is not the case. Rather, the decisions are controlled by the technological uncertainties and consequently by the seller company. However, the findings show further that the intention of the salesperson in allowing the customer of having choices is partly in line with the statement of Ryan and Deci (2006), who concluded that autonomy is a basic human value which should be met by each individual person. This is partly because some of the interviewed salespeople admitted that they behave this way to convey the feeling that the customer's decisions in the sales process were his alone. This is in line with Murphy, Illes, and Reiner (2008), who argued that the key objective of marketing is to manipulate consumer behaviour, which signifies an attack on autonomy. The fact is that the salespeople try to manipulate the customers to gain an advantage. This manipulation is detected by the automatic social cognition system, which may lead to a threat response in the customer's brain (Carter, 2009).

Furthermore, the interviewed salespeople state that the customers are not always clear what they actually want. The interviewed salespeople therefore think it is best when the customer makes the decision after receiving their advice. The interviewed customers say that they should describe the problem and the salesperson should then react to it. They think that those salespeople who have listened carefully know where their problem lies and can offer feasible choices to solve it. However, the salespeople and customers interviewed for this study agree on the following: when a project is realised, the final decision is always made by the customer. Salespeople generally know how the project is to be implemented. Salespeople guide customers to the point where the customer can decide. Thus, the salesperson must always identify opportunities so that customers can decide for themselves because a salesperson's ability provides key information for the customer's decision-making process (Borum, 2010). This is consistent with the emerging concepts of offering feasible choices. The findings show that salespeople present a range of different solutions for a customer's problem and that they present different quotes or at least three options within a quote so that the customer can make his decision. In the same context, salespeople present the advantages and disadvantages of the choices and submit a proposal so that the customer can decide within his range of competencies and budget. This leads to the emerging concept of presenting the pros and cons.

As already indicated above, further findings of this social domain indicate that the customer is not entirely clear on how his problems can be solved, so he must trust the salesperson to lead him to the required solution. The interviewed salespeople say that it is very challenging to apply control behaviour. On the one hand, the salesperson must understand the customer's problem in depth, but on the other, he must be certain that the customer understands the proposed solution and give the customer the opportunity to decide for himself. The salespeople interviewed in this study confirm that they always let the customer believe that it was his own idea which led to the solution and decision. They think that the customer will most definitely come back if autonomy is applied in this way.

The interview data from the participants also shows that this autonomy process takes place partly unconsciously. In addition to that, the findings show that salespeople must apply the control behaviour in a very focused manner. When negotiations are at a point where the deal has not yet been finalised, most salespeople pick up the phone or meet the customers again. During these communications, the customer's verbal and non-verbal actions are important as a whole, and the aspects of the salesperson's cognitive performance will determine certain behaviours on the part of the customer. In such situations, supported by the findings, salespeople should not force the customer to choose a particular solution, but rather highlight the favoured solution with technical facts. Again, this is further evidence that salespeople should apply control behaviour in this way so that the customer always has the feeling that the solution to a problem has been his alone.

7.2.4.4 Synthesising the Empirical Findings with the Literature for the Social Domain of Autonomy

This section will synthesis the empirical findings with the literature for the social domain of autonomy. In reflecting on the concepts of the social domain of autonomy, *offering feasible choices, presenting the pros and cons and applying adequate control behaviour* attempt to produce interpersonal reward situations within a customer's brain that may lead to the development of a long-term salesperson-customer relationship.

The salesperson's cognitive performance introduced in Section 2.2.5 seems to have the potential to activate the unconscious part of the customer's human reward system with the concepts emerging from the social domain of autonomy. It is not only the actual autonomy but also the perceived autonomy (Deci & Ryan, 2000) which potentially activates the reward process over the automatic social cognition system (Carter, 2009). The findings of this study illustrate how the salesperson gives the customer the perception of having choices and how he uses control behaviour so that the customer feels as though the decision is his alone. Therefore, the findings show that autonomy may have a positive impact on the interpersonal relationship between two individuals (Deci & Ryan, 2000), and consequently on the relationship development process between a salesperson and a customer.

The three emerging concepts of the social domain autonomy represent the perceived autonomy in the decision-making process of a customer (Section 2.2.6). These concepts have potential to produce interpersonal reward situations in the customer's brain under certain circumstances that may lead to the development of a long-term salesperson-customer relationship (Section 3.4). However, as indicated above, the prevailing conditions in a sales deal do not allow for complete autonomy. The dimension of social cognitive neuroscience shows the process of how perceived autonomy can cause interpersonal reward situations in the brain of a customer. This autonomy process is very often executed unconsciously in the brain. By activating the reward process in the customer's brain, the customer feels pleasure (Carter, 2009) while at the same time developing confidence in the salesperson (Ingram et al., 2008). It is vital that the salesperson is aware of the concepts of autonomy which could produce interpersonal reward situations in the customer's brain

under certain circumstances. If a salesperson neglects these facts, threating situations may arise and end the relationship immediately.

There is further evidence of why salespeople only sometimes allow the customer the freedom to decide (Section 7.2.4.1) and why customers only sometimes want the freedom to decide (Section 7.2.4.2). The findings show that customers do not always exactly know which specifications are required for their particular type of complex and customised product or service. In such situations, they simply listen to what the salesperson has on offer. The customer may also not have sufficient technological knowledge to decide, or want to delegate the responsibility. Therefore, it is extremely important for sales personnel to apply the above-mentioned three concepts in their sales strategy. If this is done, the customer develops confidence in the salesperson and the development of a long-term salesperson-customer relationship is reinforced (Ganesan, 1994; Razzaque & Tan Gay Boon, 2003). This in turn may lead to intentions to purchase and repurchase and to positive WOM (O'Connell et al., 2011; Palmatier, 2008).

7.2.5   Social Domain of Social Status

This section will present the findings for the social domain of social status, which was introduced in Section 4.2.5. This social domain investigates how salespeople participate and interact with their customers in sales conversation. It especially investigates how salespeople express their social position and how they behave towards lower-ranking customers.

The findings of this social domain show that within the development of a long-term salesperson-customer relationship with high cost, complex products and services in the high-technology B2B sector, the salesperson must behave positively towards the customer and be actively involved in sales conversations. An appropriate role within the organisation and an adequate education are mandatory if a salesperson wishes to be viewed as a serious partner by the customer and to pursue these two aspects when dealing with his customers in this business setting (Section 6.2.2).

> *"The combination of position and education is important. The customer must have the feeling that he is speaking with the right person. It also makes it easier when the customer feels that his opposite number is an expert. The customer doesn't feel like he is being taken seriously when a person comes by with a low-level position or with an education that has nothing to do with the business." (Salesperson 1)*

The customers in turn appreciate it when a high-ranking salesperson is present in significant sales discussions.

> *"That is a point to note in the sector with complex and customised products and services. I have always appreciated it when a high-level person appears at my business." (Customer 3)*

Whilst it is essential for a salesperson to present himself confident and as an expert within the respective field, he should not see himself as too important in the relationship with the customer. The interviews with the senior executive salespeople and high-level customers showed that a salesperson will not be accepted by the customer if he only talks about himself and his successful completion of projects. It is much more important that he can deal effectively with the customer's issue.

> "The salesperson must be accepted. However, that happens for the most part with technical skills and expertise and honest information towards the customer. [A salesperson] needs to be good at what he is doing and he should always understand the customer's questions. If he starts to act like he understands the problem but in fact he doesn't, then that can have negative consequences for the business." (Salesperson 8)

In Central Europe in particular, salespeople are reluctant to talk about their social status in front of a customer.

> "I say what my primary responsibilities are and then [the customer] finds out for himself what type of role that I have. I'm very circumspect when I present my role, and I don't do it openly. When you swap business cards, then [the customer] is forced to see what sort of role I have within my organisation." (Salesperson 12)

The seller company and its performance should always be in the foreground, and not individual characters within a company. Finally, a seller company is only successful if the whole organisation works collectively together.

> "I do it the same way these days as I did in the past. I always represent the company and its interests. I am the one who manages the business and takes care that revenue is generated. I try to keep my social status as flat as possible. That shows itself in the way I try to show warmth through personal proximity and not dominate proceedings by keeping myself aloof." (Salesperson 16)

Table 41 below summarises the empirical findings of the social domain of social status. These findings contribute to the finalised conceptual framework (Section 7.3) by illustrating how salespeople participate and interact actively in sales conversations. These findings represent the last part of the finalised conceptual framework, which shows a way to create a window into the black box of the customer's mind in the development and maintenance of a long-term salesperson-customer relationship.

Table 41: Findings for Social Status

Category	Participating and interacting actively in sales conversations.
Social Status	How to explain the business position and how to reduce the potential impact of the business position.
Focused coding	

1	Disclose one's decision-making authority
2	Respectful attitude towards customers
3	Not overinflating one's own position

Topic for social status
The social domain of social status encompasses the concepts of <u>disclosing decision-making authority</u>, <u>respectful attitude towards customers</u> and <u>not overinflating one's own position</u>.

Source: Author

Table 41 shows how salespeople participate and interact actively in sales conversations, and provides examples of what was said by the participants of the study. Neuroscientific investigations conducted into social status have shown that a person who appears to have a lower social status than his conversation partner can think more deeply about the feelings and thoughts of others. This in turn results in more active communication with the conversation partner, and could potentially increase the social status of the conversation partner. This means if a customer's social status is raised, then the reward regions in his brain may be positively activated (Section 4.2.5).

Tables 42 – 44 below provide the focused coding for 1, 2 and 3 for the social domain of social status.

Table 42: Focused Coding Number 1 of Social Status

Focused coding 1	
Disclose one's decision-making authority Disclose the salesperson's decision-making authority so that the customer can gain a sense of where the salesperson's decision-making authority, competency and experience lie.	
Salespeople: 1, 2, 3, 5, 6, 11, 12, 14, 16, 17, 18 Customer: 1, 2, 3, 4	Explain the experience and the responsibilities/discuss the salesperson's role and the scope with respect to the company structure and processes
The following quotes illustrate how salespeople attempt to disclose their decision-making authority towards the customer (salespeople left/customers right):	
"I introduce myself and say that I am responsible for this sales division. Then the customer usually asks how long I have been in the company and what I have already done." (Salesperson 3) *"That is the key point. On the one hand, I need to make it clear to the customer that I am responsible, but on the other hand, I need to be very professional with technical information. Credibility is paramount. I*	*"If a salesperson introduces himself as a senior or vice president, then I know that he has a lot of experience in his field. But at the same time, I also know that this is only a title which the company has given him. Some other senior salespeople with an academic title come to see me. This gives me confidence because the competence to make decisions is always connected with the role and the academic background. [I] notice very quickly if someone*

play down my role instead of blowing my own trumpet." (Salesperson 6)	*has to ask his superior when setting prices." (Customer 2)* *"Around 80% of sales managers do that discreetly and keep their successes and titles in the background. We swap visiting cards and talk about their responsibilities in their company." (Customer 4)*

Eleven of the salespeople and four of the customers believe that it is important for salespeople to disclose their decision-making authority so that the customer can gain a sense of where this authority lies. By disclosing his decision-making authority, the salesperson gives the customer an indication of his experience and responsibilities.

Table 43: Focused Coding Number 2 of Social Status

Focused coding 2

Respectful attitude towards customers
Demonstrate respect and decency, and be appreciative towards the customer so that his self-esteem can be increased.

Salespeople: 1, 2, 5, 6, 7, 8, 9, 10, 12, 14 Customer: 2, 4	Ask about the customer's personal and business needs/offer to carry out certain tasks by themselves and not simply to delegate them

The following quotes illustrate how salespeople attempt to pursue a respectful attitude towards customers (salespeople left/customers right):	
"[Communication with the customer] is always a question of respect. It is actually not related to the salesperson's position within the organisation (Director, Operator)... We are not used to thinking in hierarchies. Respect and awareness of the person you are speaking to is what matters. I try to categorise people by ability, characteristics, integrity; that seems more natural to me." (Salesperson 1) *"I also go to the heart of the problem, even with entry-level employees. I can do this because I have lived it all myself in my earlier positions. That isn't difficult. I also listen to these customers. That makes them feel sure. When I ask about his dreams, then he opens up." (Salesperson 9)*	*"That begins with good preparation for a sales process so that you know exactly where [the customer] has studied, what his experiences are and that you know exactly what the customer's current situation is." (Customer 2)* *"Honest recognition of performances and successes. I really value it and no one has anything against it." (Customer 4)*

Ten of the salespeople and two of the customers mention that salespeople should demonstrate a respectful attitude towards customers. The interviewed salespeople and customers believe that salespeople in general should not only ask about the business needs

but also find out the customer's personal needs as well. This makes it possible to satisfy both the customer's needs. Furthermore, the interviewed participants think that salespeople should offer to carry out certain tasks by themselves and not simply delegate them.

Table 44: Focused Coding Number 3 of Social Status

Focused coding 3	
Not overinflating one's own position Not artificially raising and not overinflating their position so that the possibility of a deal can be discussed and no false signals concerning social position are sent.	
Salespeople: 2, 4, 6, 7, 8, 10, 17, 18 Customer: 1, 3, 4	Minimising the awe on the customer's side by trying not to be instructive/giving the customer the feeling that he knows more than the salesperson himself
The following quotes illustrate how salespeople attempt to not overestimate their own position (salespeople left/customers right):	
"I always try to play down my own position. I always give [my customers] the feeling that they know more than I do. I ask questions about topics that the customer knows well. The customer must feel secure in his role. I never have hierarchy problems. I always want to sell my systems. That is my focus." (Salesperson 8) *"It is always good to give competent answers; that shows you appreciate the customer. It doesn't matter what title is on your business card. Is what I say correct or not more than just words. As soon as a customer feels that you are good at what you do, then you've got a foot in the door." (Salesperson 17)*	*"The sales managers have declared their own position to me in very few cases. You also notice when you look around to see who the sales manager is. Acceptance comes with the task they hold and the position they fill." (Customer 1)* *"Respect and restraint are what is called for. This does not mean you put yourself down. It is important to judge the power distances." (Customer 3)*

Source: Author

Eight of the salespeople and the three of the customers believe that the salesperson should not overinflate the decision-making authority afforded to him because of his position during his conversations with the customer. Hence, it seems to be important that the customer should discuss the possibility of a deal with a salesperson with an adequate decision-making authority when high-technology products and services are sold. Salespeople attempt to minimise the awe on the customer's side by trying not to be instructive and giving the customer the feeling that he knows more than the salesperson himself.

7.2.5.1 Disclosing the Salesperson's Business Position
Table 45 below focuses on Question 21 and shows how often salespeople see themselves to disclose their business position during a customer meeting.

Category social status		
Disclosing the Salesperson's Business Position		
Salespeople: 4, 9, 11, 13, 18	Customer: 1, 3, 4	Always
Salespeople: 3, 17	Customer: 0	Often
Salespeople: 1, 2, 5, 7, 8, 12, 14	Customer: 0	Sometimes
Salespeople: 6, 10, 16	Customer: 2	Rarely
Salespeople: 15	Customer: 0	Never
The following quotes illustrate why salespeople are not always able to disclose their business position in front of the customer (salespeople left/customer right):		
"I actually always say what my title and my position are. Then I focus more on my customer's needs rather than myself. I try to put myself on the customer's level, whether it is that of a CEO or that of an operator." *(Salesperson 4)* *"Salespeople sometimes mention their business position; they always mention their role… that is not the same. You need to be aware that the two are connected."* *(Salesperson 14)* *"The customers already know who I am before we meet. I just focus on what I need to do for them and on nothing else, and definitely not this political status banter."* *(Salesperson 15)*	*"Salespeople have always let me know what their position is. At the same time, they have always tried to stroke my ego. That is how it has always been and it has also had a positive effect on me."* *(Customer 1)*	

Source: Author

Five salespeople and three customers mention that salespeople always disclose their business position in salesperson-customer meetings. Two salespeople mention that they do this often and seven mention that they do this sometimes. Three salespeople and one customer believe that salespeople rarely disclose their business position. One salesperson mentions that he never does this.

7.2.5.2 Improving the Customer's Business Position
Table 46 below focuses on Question 22 on how often the salespeople try to improve the customer's business position.

Category social status		
Improving the customer's business position		
Salespeople: 8, 9, 10, 16, 17, 18	Customer: 0	Always
Salespeople: 2, 3, 4, 5, 7, 11, 12	Customer: 1, 3	Often
Salespeople: 1, 6	Customer: 2, 4	Sometimes
Salespeople: 0	Customer: 0	Rarely
Salespeople: 13, 14, 15	Customer: 0	Never
The following quotes illustrate why salespeople are not always able to improve the customer's business position (salespeople left/customer right):		
"If I can, then I am happy to do it. If I feel that the customer is enjoying it, then I definitely do it. However, I rarely plan to do so in advance. In this case, it is very important to be honest. If I think something is super, then I also always say so. But then it always has to be awesome; otherwise, I don't say anything. If it wasn't this way, I would find it rather dubious [to say the least]." (Salesperson 10) *"I don't think it is my responsibility to bolster the customer's ego. That's his business. I think it's very important to take a customer seriously and to treat him with respect. However, when he has a problem with his social position, then it's his business." (Salesperson 14)* *"I always give the customer the feeling that he is very important for us, independent of his status and position." (Salesperson 16)*	*"It is never bolstered through false compliments which raise my status. That would undermine the professionalism and spoil the openness." (Customer 2)*	

Source: Author

Six salespeople mention that they always try to improve the customer's business position. Seven salespeople and two customers mention that they have often tried this; whereas, two salespeople and two customers thought that this only happens sometimes. Three salespeople never try to improve the customer's business position. The subsequent discussion of the findings of Section 7.2.5 and the responses of the senior executive sales personnel and the high-level customers will be discussed in greater depth in Section 7.2.5.3.

7.2.5.3 Building the Conceptual Framework: Adding the Domain of Social Status

This section will discuss the findings for the social domain of social status and their relevance in participating and interacting actively with their customers in sales conversation. The social domain of social status encompasses the three concepts of *disclosing decision-making authority, respectful attitude towards customers* and *not overinflating one's own position*. These concepts have the potential to produce interpersonal reward situations within a customer's brain that may lead to the development and maintenance of a long-term salesperson-customer relationship (Figure 21). The findings for disclosing the salesperson's business position (Section 7.2.5.1) and improving the customer's business position (Section 7.2.5.2) are integrated into the second layer of the following figure and discussed further in Section 7.2.5.4.

Figure 21: Elaborated Conceptual Framework for Social Status
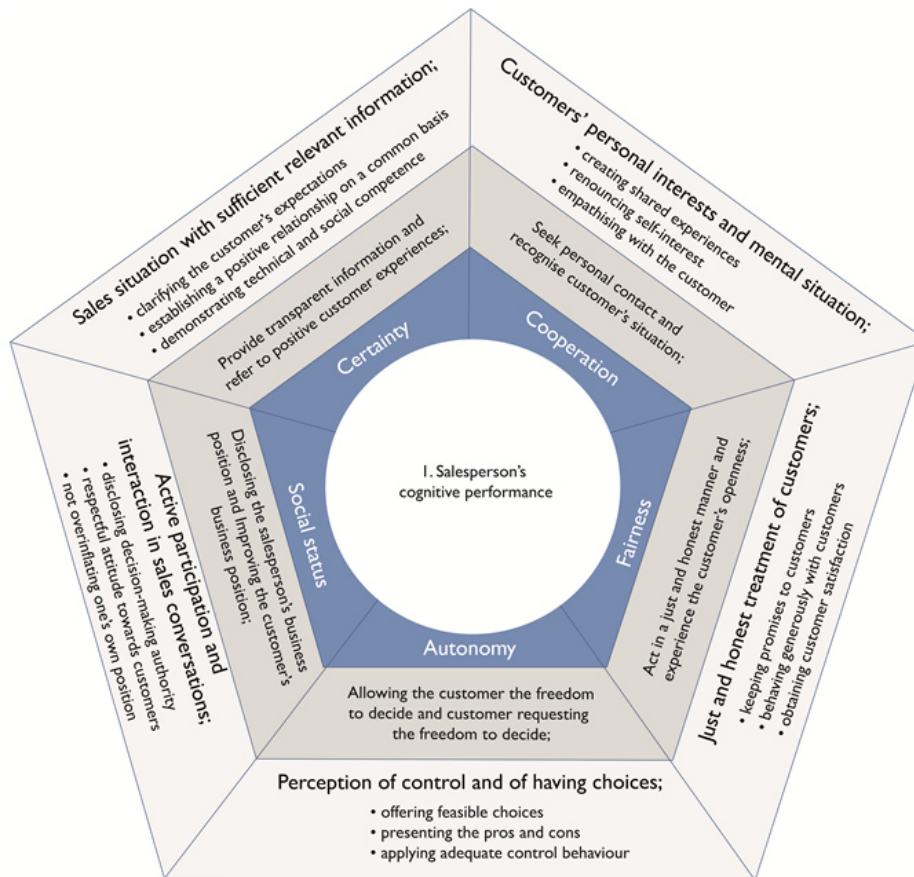
Source: Author

The findings for the social domain of social status demonstrate that active participation and interaction in sales conversations is crucial from the very first moment a salesperson meets a customer. The findings of this social domain also show that a salesperson must *disclose his decision-making authority* from the first moment he meets a customer. In the further phases of the sales conversation, a *respectful attitude towards the customers* should be adopted. In addition to that, the findings show that a salesperson should never *overinflate his own position*.

The findings demonstrate further that salespeople who do business with complex and customised products and services do not actually place much importance on disclosing their position in their organisation. Instead, they deem decent, respectful communication to be more necessary. The interviews show that higher-ranking salespeople do not notice the effect that their business position could have on their customers' expectations.

The findings also reveal that the interview participants believe that customers from the high-technology B2B sector in Central Europe often pay attention to the educational background of each salesperson and based on this, whether the salesperson can adequately fulfil his job challenges. The findings are further evidence that once a customer feels that the salesperson is competent, then the customer will disclose more relevant information on a project such as technical specifications or budgetary relevant data. This means that social status in the B2B sector in Central Europe is tied in more with participating and interacting actively in sales conversations.

However, social status shapes and determines the dynamic of a social group, and determines the social power which will be attributed to each of the group members (Hareli et al., 2011). This means if an individual salesperson has a higher rank, this is often associated with a higher decision-making authority. The findings indicate that this is compliant with the emerging concept of disclosing decision-making authority. The findings further indicate that senior executive salespeople often explain the experience they have gained in their work environment and disclose the management responsibilities that they hold in their company. Furthermore, senior executive salespeople often discuss their role and scope with respect to the company structure and processes. This is somehow in disagreement with the fact that salespeople are encouraged to determine the customer-status-relevant criteria such as occupation, wealth and the affiliation to social groups with a high social status from the first moment of customer contact (Oakes & Rossi, 2003). The findings indicate that salespeople are very often aware of the effects that status can have on the conversation partner. Therefore, they must be very careful not to threaten the customer's social status because this would result in a feeling of social rejection (Eisenberger et al., 2003).

The interview data provides strong evidence that most of the salespeople are relatively conservative in disclosing their social status and their related business role towards their customers in the high-technology B2B sector in Central Europe. The findings show this is because the development and maintenance of a long-term salesperson-customer relationship in this region is based on the business itself, such as for example on the skills and competence of salesperson, rather than on titles on a business card. When the interviewed salespeople were confronted with the argument that they are responsible for raising the customer's status, they said they did not consider this to be one of their tasks and believed that it would not have a significant impact on the business itself. Instead, they attached greater importance to taking customers seriously and treating them with respect. This somehow contradicts the fact that once a person's social status is identified, this results in set of expectations about their own status and their counterpart's role (Ridgeway & Diekema, 1989). Hence, the role is given to the higher-ranking individual who seems to have more information or more social respect (Kraus & Keltner, 2009). The lower-ranking

individual is more actively involved in interactions (Fiske, 1992). Therefore, it is of vital importance that sales personnel display their social status in a discrete manner during business negotiations with customers. The findings show that an adequate display of social status means that the sales personnel do not artificially raise or overinflate their position so that the possibility of a deal can be discussed and no false signals concerning social position are sent. The concept of a respectful attitude towards customers during the business interaction is essential in this context. The findings show that salespeople in customer contact situations ask about the customer's personal and business needs and offer to carry out certain tasks by themselves and not simply to delegate them.

Furthermore, the data from the interview shows that salespeople always try to represent the company and their products and services in the best possible way. They always try to keep their social position as low as possible. This can be seen in their appearance or the way they try to generate a personal relationship. This is not done by sovereignty or by maintaining distance, but rather by personal closeness. Respect and restraint as well as the estimation of personal distances are important. This situation is reflected in the concept of not overinflating one's own their position. In line with the findings, salespeople try to minimise the awe on the customer side by trying not to be instructive (Muscatell et al., 2012). Furthermore, the findings indicate that salespeople sometimes give the customer the feeling that he knows more than the salesperson himself. This behaviour actually has a positive effect on the customer behaviour because the perception of social status activates the same brain areas as mentalising does (Section 2.2.5). This has the potential to activate the customer's human reward system (Dietvorst et al., 2009; Frith & Frith, 2003; Lieberman, 2007), which produce interpersonal reward situations.

7.2.5.4 Synthesising the Empirical Findings with the Literature for the Social Domain of Social Status

This section will synthesis the empirical findings with the literature for the social domain of social status. In reflecting on the concepts of the social domain of social status, *disclosing decision-making authority, respectful attitude towards customers* and *not overinflating one's own position* attempt to produce interpersonal reward situations within a customer's brain that may lead to the development of a long-term salesperson-customer relationship.

While applying these concepts, a salesperson has the potential to generate interpersonal reward situations in the customer's brain with his cognitive performance (Section 2.2.5). This may be because he discloses his decision-making authority and tries to reduce the potential impact of his business position when he uses this approach. A salesperson applying these concepts attempts to activate brain regions which have the potential to address the automatic social cognition system of the customer's human reward system under certain circumstances. A positive effect of these concepts could be an increase in the customer's social status, which may activate the reward regions in the customer's brain (Izuma et al., 2008). If the significance of these concepts is ignored, threating situations may arise and possibly lead to immediate termination of the relationship (Eisenberger et al., 2003).

There is additional evidence (Section 7.2.5.1) which shows why salespeople are not always able to disclose their business position and why they do not always try to improve the customer's business position (Section 7.2.5.2). One of the main things that emerged from the findings is that salespeople are not aware of the dimension of social cognitive neuroscience and do not know that both reward and threat situations could occur. Threat situations can lead to abrupt termination of the business relationship between salespeople and their customers. The findings indicate that salespeople believe that only hard facts count and not the ascertainment of social status within a structure. The findings provide further evidence that salespeople try to give their customers the feeling that they are important, regardless of their social status. From the theory of social cognitive neuroscience, it emerges that a customer unconsciously perceives when a salesperson has dishonest intentions (Iacoboni et al., 2005). Emerging practice within this study also shows that many relationships fail mainly due to the dominance of social status. Thus, the more the salesperson honestly values the customer in his status, the more this seems to result in a long-term salesperson-customer relationship. With positive interactions over time, customer intentions to purchase, repurchase and to refer are generated (Castaldo, 2007; Weber et al., 2005).

7.3 Presenting the Finalised Conceptual Framework and the Black Box of the Customer's Mind

This section will summarise the empirical findings from the afore-mentioned sections. In addition to that, the findings emerging from the 22 face-to-face interviews with senior executive sales personnel and high-level customers and the three salesperson-customer observations will be synthesised with the reviewed literature on social cognitive neuroscience (Chapter 2) and the characteristics of a long-term salesperson-customer relationship (Chapter 3). Figure 22 below contains a summary of the key empirical findings of this study synthesised with the theoretical literature.

The findings from the interviews with participants from the high-technology B2B sector with complex and customised products and services (Figure 22, point A) seems to support existing neuroscientific evidence that the salesperson and his cognitive performance is the centre in creating a window into the black box of the customer's mind (Figure 22, point B). The black box consists of the salesperson's cognitive performance, the five social domains, the emerging topics and concepts and the human reward system. The salesperson and his cognitive performance seems to form the focal point in activating certain brain areas underlying the social domains of experience with the respective topics and concepts. There are some neuroscientific indications that the social domains of experience have the potential to engage with the customer's human reward system, which would create an unconscious urge. This in turn would cause a conscious desire in the controlled social cognition system.

Figure 22: Finalised Conceptual Framework in the Context of this Study
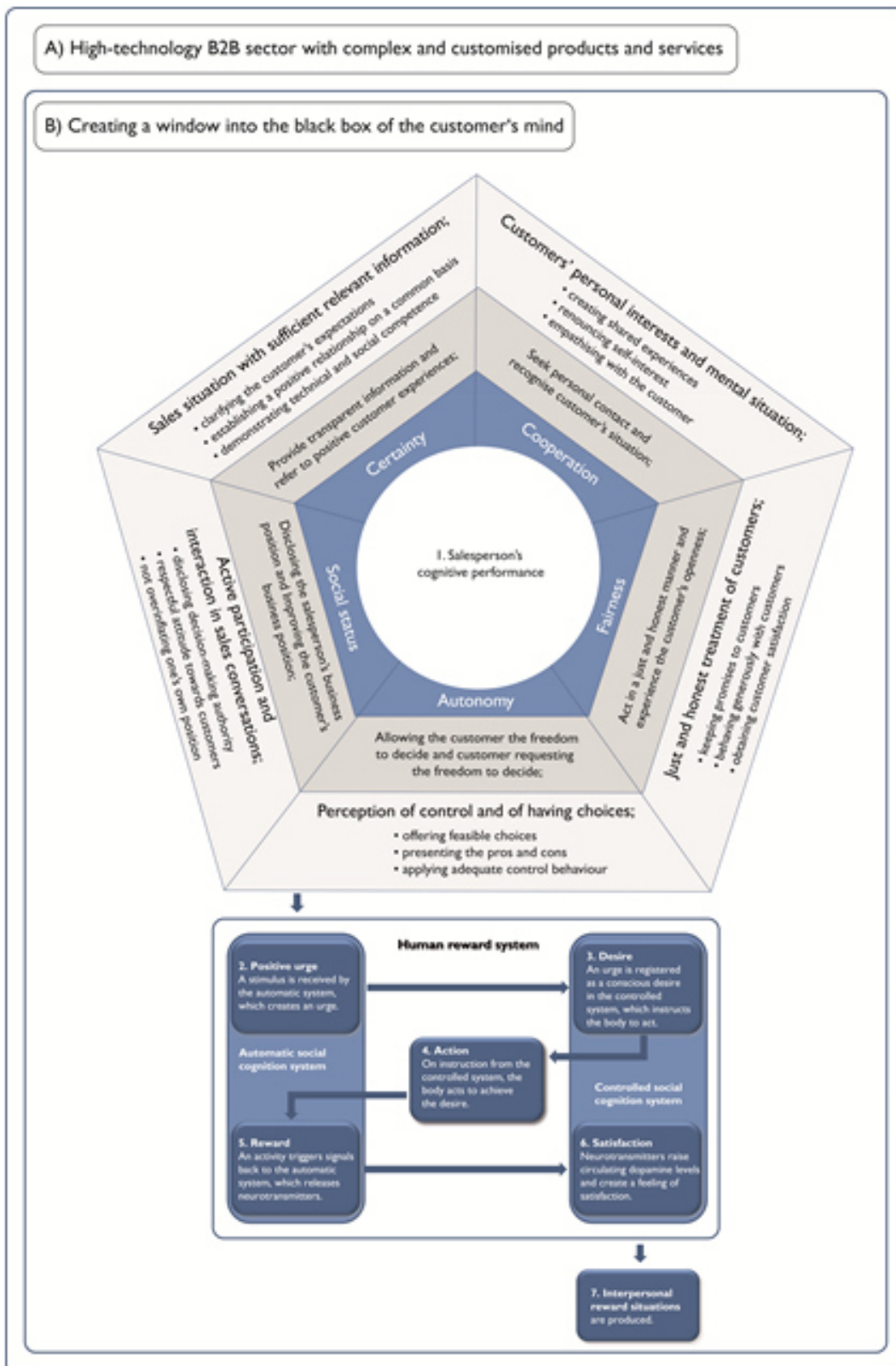
Source: Author

This desire instructs the customer's body to perform an action. This action triggers signals back to the automatic social cognition system, which then releases neurotransmitters and

creates a situation of satisfaction in the customer. The activity which triggers signals back to the controlled social cognition system is regarded as an interpersonal reward situation in the customer's brain (Carter, 2009). Therefore, interpersonal reward situations can be seen as positive interactions over time (Weber et al., 2005), which give the customer a feeling of satisfaction if they are positively addressed by the salesperson's cognitive performance.

The findings of the five social domains could provide further explanation of how a salesperson attempts to produce an interpersonal reward situation in the customer's brain. These findings suggest that there is a possible link between the social domains of experience and interpersonal reward situations. A salesperson attempts to produce interpersonal reward situations by (1) *creating a sales situation with sufficient relevant information*, (2) *recognising the customer's personal interests and mental situation*, (3) *treating customers in a just and honest manner*, (4) *giving the customer the perception of control and of having choices*, and (5) *participating and interacting actively in sales conversations*.

Therefore, the possible link between these social domains of experience and the interpersonal reward situations seems to create a window into the black box of the customer's mind in salesperson-customer interactions in the B2B sector with complex and customised products and services in Central Europe.

The emerging topics and concepts indicate that the automatic and the controlled social cognition systems underlying the human reward system must be included in the explanation of long-term salesperson-customer relationships because this adds a new dimension to the description of these relationships. The integration of the human reward system could improve researchers' and practitioners' understanding of the development of a long-term salesperson-customer relationship and the consequences that this may have in terms of purchases, repurchases or positive WOM (Palmatier, 2008). The findings seem to demonstrate that the insights from social cognitive neuroscience further clarify what the salesperson must deliver in certain customer contact situations to ensure that the social domains of experience related brain areas may be positively activated. A better understanding of the human reward system in the development and maintenance of long-term salesperson-customer relationships in turn would lead to a better understanding of how to enhance the relationship quality in salesperson-customer dyads (Section 3.3.1).

The findings of this research study confirm that the finalised conceptual framework contributes to a high-quality relationship between the salesperson and the customer. This is mainly due to the fact that the concept of relationship quality is an overarching construct which consists of several different components (François & Van Goolen, 2005), and that high-quality relationships result from elevated levels of trust, commitment and satisfaction (Wulf et al., 2001). Thus, the finalised conceptual framework topics and concepts seem to activate the human reward system, and interpersonal rewards situations may be the result. This in turn could contribute to a high-quality relationship between the salesperson and the customer in the high-technology B2B sector with complex and customised products and services in Central Europe.

7.4   Conclusion

This chapter presented the empirical findings from the 22 face-to-face interviews with senior executive salespeople and high-level customers and the three structured participant observations. Furthermore, this chapter synthesised these empirical findings with the five social domains of experience: certainty, cooperation, fairness, autonomy and social status which were introduced in Chapter 4. The result is a holistic overview of the finalised conceptual framework (Section 7.3), which shows one way that salespeople can create a window into the black box of the customer's mind. Thus, this conceptual framework contributes knowledge to the field of salesperson-customer relationships because it provides unique neuroscientific insights into the process of building and maintaining long-term salesperson-customer relationships.

The synthesis between the empirical findings and the five social domains of experience has shown how salespeople attempt to produce interpersonal reward situations in the customer's brain. The results of this are specific topics and concepts which have validity in the high-technology B2B context with complex and customised products and services: 1) A sales situation with sufficient relevant information is achieved by *clarifying the expectations of the customer*, *demonstrating technical and social competence* and *establishing a positive relationship with common ground*. 2) A customer can recognise a customer's personal interests and mental state when the salesperson *creates shared experiences*, *puts his own self-interests aside* und *empathises with the customer*. 3) The salesperson is perceived to be just and honest when he *keeps promises towards the customer*, *behaves generously towards customers* and *obtains customer satisfaction*. 4) The customer can be given the perception of control and of having choices if the salesperson *offers feasible choices*, *presents the pros and cons*, and *applies adequate control behaviour*. 5) Participating and interacting actively in sales conversations encompasses the concepts of *disclosing decision-making authority*, *a respectful attitude towards customers* and *not overestimating the salesperson's position*. The first relates to the social domain of certainty, the second to the social domain of cooperation, the third to the social domain of fairness, the fourth to the social domain of autonomy, and the fifth to the social domain of social status.

Finally, the findings of this chapter could be viewed as evidence of how the social domains of experience could integrate the automatic social cognition system underlying the human reward system into the development and maintenance of long-term salesperson-customer relationships. This is an essential contribution to the existing body of knowledge in this field because it may provide salespeople with a competitive advantage over their competitors and ultimately lead to more purchases, repurchases and positive WOM in the long run.

8   CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The aim of the study was to discover exactly what kind of additional insights can be gained from social cognitive neuroscience about the process of building and maintaining long-term salesperson-customer relationships. B2C, B2B, high-technology and social cognitive neuroscience literature was systematically reviewed and relevant material was drawn from it (Section 4.2, Table 5) to introduce five social domains of experience. These five social domains of experience reinforce existing salesperson-customer relationship concepts and at the same time offer new insights into factors that contribute to relationship development and maintenance. A list of value criteria was used to assess the five social domains of experience to be investigated (Section 4.2, Table 6). These five social domains of experience enabled the researcher to collect empirical data and to analyse and to discuss it in the context of this study (Chapters 6 and 7). The resulting insights and findings were presented in a finalised conceptual framework (Section 7.3, Figure 22), which opens up a window into the black box of the customer's mind (Figure 28) and highlights the significant role that the human reward system could play in the sales process and in the interaction between a salesperson and his customer.

After this introductory section, Section 8.2 will present the main outcome of the thesis and its importance for sales staff. Section 8.3 will present a review of the other outcomes in relation to the research objectives and reflect on how the findings are transferrable to other contexts. Section 8.4 will discuss the contributions of this study and explore the role of the technical salesperson in greater depth. Section 8.5 will present the implications for managers and sales staff, and provide guidelines for sales managers. Finally, Section 8.6 will analyse the limitations of this study and provide recommendations for further research.

8.2 Main Outcome of the Thesis and its Importance for Sales Staff

This thesis provides an invaluable insight into the role and importance of the Human Reward System in building and maintaining long-term salesperson-customer relationships. By combining insights from social cognitive neuroscience (the customer's unconscious mind) with established salesperson-customer relationship constructs (psychological antecedents) (Section 4.2, Figure 14), it demonstrates how salespeople can gain a better understanding of their role as relationship builders with new customers. This is illustrated in the finalised conceptual framework (Section 7.3, Figure 22), which opens up a window into the customer's mind (Figure 28) and highlights the significant role that the human reward system plays in the sales process. It also provides an insight into the way in which salespeople could potentially influence aspects of the sales situation to create positive relationship outcomes. This framework is built up with well-founded information about the salesperson's cognitive performance (Section 2.2.5), the social domains of experience (Section 4.2), empirically gathered data (Chapters 6 and 7), the automatic and controlled brain networks underlying

the human reward system (Section 2.2.1) and an explanation of how interpersonal reward situations could be produced in the customer's brain (Section 2.2.4).

The findings of this study show that while social cognitive neuroscience has the potential to provide further insights into some of the mysteries of the sales process and may complement existing salesperson-customer concepts, it is not a universal panacea. It is too simplistic to argue that salespeople now have a tool with which they can produce interpersonal reward situations via the five social domains of experience which then lead to more purchases. Neuroscience should instead be viewed as a further crucial piece in the jigsaw puzzle of the sales process. Therefore, the findings compiled into the finalised conceptual framework illustrate a possible connection between the social domains of experience and the production of interpersonal reward situations in the customer's mind, which offer salespeople a way to better understand how to achieve important outcomes such as increased purchases and repurchases and positive WOM. The findings of this study also reinforce existing salesperson-customer relationship concepts and provide a detailed picture of how these relationships develop and are maintained via the five social domains of experience. In addition to that, this study explores the reasons why many researchers find social cognitive neuroscience so fascinating nowadays. In doing so, it shows the value of applying insights from this burgeoning interdisciplinary field of research to the development and maintenance of salesperson-customer relationships.

Existing studies explain relationship quality (Section 3.3.1), its antecedents (Section 3.3.3) and its consequences (Section 3.3.2), but there has been no research conducted into how these antecedents may affect the unconscious part of the human reward system in the customer's brain to date. The lack of information in this area exemplifies the research gap identified by this study: existing studies have not included the automatic and controlled brain networks underlying the human reward system into the perspective of salesperson-customer relationships yet. Social cognitive neuroscience uses functional neuroimaging techniques and allows for investigations into several regions of the brain and brain structures through specific audio-visual impulses arising in social situations. If these insights from social cognitive neuroscience were applied, this could improve salespeople's understanding of how the customer's brain and its underlying processes may function. A salesperson in the high-technology B2B context is always looking for long-term relationships because of the high risk and the high uncertainty which are present in this business environment. Accordingly, if a salesperson now had a better understanding of how the unconscious part of the human reward system could contribute to producing interpersonal reward situations in the customer's mind, this would be a great advantage and potentially minimise the high risk and uncertainties present during the development and maintenance of long-term salesperson-customer relationships. With the help of the neuroscientific insights, the salesperson would be able to explain that the five social domains of experience have the potential to produce interpersonal reward situations within the customer's mind. This is turn would enable him to augment existing salesperson-customer relationship concepts with the knowledge gained about the human reward system.

Although the research results from social cognitive neuroscience seem to be promising for salesperson-customer research, they do have several significant limitations. A detailed summary of the possible limitations, consequences and advantages of applying social cognitive neuroscience to a salesperson-customer relationship is provided in Section 2.2.1 of this study. Despite the limitations, the application of insights from social cognitive neuroscience could potentially add a unique perspective to existing salesperson-customer concepts. It also offers promising avenues for further research (Section 8.6). For example, additional neuroscientific research could be carried out on the basis of this study to investigate the link between the social domains of experience and the automatic social cognition system (unconscious part of the human brain) underlying the human reward system (Section 4.3.1, Figure 15). This would allow further valuable insights into the activation of the limbic system or specific brain areas in particular during salesperson-customer interactions (Section 2.2.2, Figures 4 and 5).

8.3 Review of the Other Outcomes of the Thesis in relation to the Research Objectives

This section will review the other outcomes of this thesis in relation to the five research objectives mentioned in Section 1.3. Each research objective will be discussed individually to highlight the overall contribution of this study. In this way, the exploratory findings and the perspectives of the senior executive salespeople and high-level customers discussed in Chapters 6 and 7 will be contextualised. Furthermore, this discussion will serve as a basis for future generalisation of the role of the human reward system in the development of salesperson-customer relationships. Finally, the window into the black box of the customer's mind (Figure 28) will be precisely derived.

> Research objective 1: To critically review the literature on social cognitive neuroscience and its application to the field of buyer-seller relationships in general and to salesperson-customer dyads in particular.

The goal of this research objective was to systematically review the existing literature on the fields of B2C and social cognitive neuroscience (Chapter 2), with particular emphasis on the literature which covers the domain of social cognitive neuroscience and its importance for relationship marketing, buyer-seller relationships in general and salesperson-customer dyads in particular. This literature also includes critical elements that highlight significant research gaps, particularly in relation to the application of social cognitive neuroscience to salesperson-customer relationships.

The latest B2C literature contributes primarily by showing how insights from neuroscience can be applied to market research. It provides examples such as product brands, product positioning, prices and consumer behaviour marketing where the application of neuroscience may provide direct access to the consumers' mind (Agarwal & Dutta, 2015; Daugherty & Hoffman, 2017; Varshney, 2016). Social cognitive neuroscience literature offers insights into

the human brain and its social cognition processes (Lieberman, 2007; Ochsner & Lieberman, 2001) and it explains the dual process framework of the automatic (reflexive) and the controlled (reflective) social cognition systems (Dimoka, Pavlou, & Davis, 2007; Lieberman, 2007; Satpute & Lieberman, 2006). Furthermore, it clarifies how the automatic social cognition systems of the human reward system could potentially be influenced (Carter, 2009) and contributes to the definition of the salesperson's cognitive performance, which can be defined as the behaviour resulting from demonstrating competence, consistency and predictability, care, empathy, mentalising, goodwill, honesty, fairness, dedication and commitment to a goal. These are well-established constructs in the buyer-seller relationship literature (Kasperson, Golding, & Tuler, 1992; Peters, Covello, & McCallum, 1997; Renn & Levine, 1991).

This literature review was used to develop an initial conceptual framework (Section 2.2.4, Figure 7), which is based on the synthesis of the above-mentioned literature, delves into the salesperson's cognitive performance, the dual-process framework of the human reward system and provides an explanation of how interpersonal reward situations can be produced in the customer's mind. The initial conceptual framework firstly highlighted the research gap of this study, which is based on the premise that the interface between the salesperson's cognitive performance and the explanation of how interpersonal reward situations can be produced in the customer's mind have still not been incorporated into the knowledge base on establishing and developing a long-term salesperson-customer relationship. Ultimately, the initial conceptual framework showed that the salesperson with his cognitive performance is the key person to unlock interpersonal reward situations in the customer's mind. Finally, the literature review on social cognitive neuroscience and its application to the salesperson-customer relationships revealed that little is known about how salespeople could potentially improve their cognitive abilities to better understand how interpersonal reward situations could possibly be produced in the customer's mind. Therefore, this literature review provides an additional lens with which to view the establishment and development of a long-term salesperson-customer relationship.

This initial conceptual framework shows how to create a window into the black box of the customer's mind. Therefore, the discussion of this research objective of this study demonstrates how social cognitive neuroscience can be applied to the field of buyer-seller relationships in general and to salesperson-customer dyads in particular. The initial conceptual framework does this by including the salesperson's cognitive performance, the automatic and the controlled social cognition systems underlying the human reward system and the explanation of how interpersonal reward situations can be produced in the customer's mind in the process of building and maintaining long-term salesperson-customer relationships.

> Research objective 2: To discuss the characteristics of long-term salesperson-customer relationships and to examine the role of the human reward system in the development and maintenance of these relationships.

This research objective aimed to critically review existing literature in the fields of B2B and high-technology on the characteristics of a long-term salesperson-customer relationship and how complex and customised products and services are personally sold (Chapter 3). The latest studies suggest that any research into such relationships which does not consider the human reward system lacks an important dimension. This is because personal selling and the effects of the human reward system are critical components of a successful long-term salesperson-customer relationship nowadays and need to be considered during investigations into the topic. High-technology literature was reviewed because of the nature of complex and customised products and services, and because it provides a platform to explore such long-term relationships. The B2C context alone would not have provided adequate evidence to explore this topic because of its transactional and therefore short-term nature (Section 3.2.2, Figure 8).

B2B literature contributes by explaining the characteristics of a long-term salesperson-customer relationship (Grönroos, 2004; Palmatier, 2008; Sheth, Parvatiyar, & Sinha, 2012) and it discusses the relationship quality, which can be conceptualised through the most frequently identified components of trust, commitment and satisfaction (Beatson, Lings, & Gudergan, 2008; Rauyruen & Miller, 2007; Storbacka, Strandvik, & Grönroos, 1994). The quality of the relationship between a salesperson and his customer serves as a key indicator for assessing customer relationships (Winkelmann, 2008). Several psychological antecedents of relationship quality such as relational selling behaviour (Crosby, Evans, & Cowles, 1990), customer orientation (Wray, Palmer, & Bejou, 1994), relationship investment (Wulf, Odekerken-Schroeder, & Iacobucci, 2001) or the customer's perception of service orientation (Beatson et al., 2008) have been frequently investigated within the relationship marketing process (Bruhn, 2013). The components of trust, commitment and satisfaction have a significant impact on the behavioural consequences of a high-quality relationship between a salesperson and his customer (Boles, Johnson, & Barksdale, 2000). The most frequently identified positive behavioural consequences of relationship quality are purchase and repurchase intention and positive WOM (Hennig-Thurau, Gwinner, & Gremler, 2002; Palmatier, Dant, Grewal, & Houston, 2007; Rauyruen & Miller, 2007). These psychological antecedents can be influenced by the salesperson and his cognitive performance (Dietvorst et al., 2009), so they could potentially be integrated the black box of the customer's mind as a result. Together with the customer's unconscious mind, this served as the basis for the social domains of experience to be defined within this study. The high-technology environment described personal selling (solution selling) within the context of complex and customised products and services. This environment mainly highlights the uncertainties and risks which are present at an early stage of a project (Pelham, 2009). Potential market uncertainties are technological uncertainty, competitive volatility, network externalities and the importance of industry standards, unit one costs, tradability problems and knowledge spillovers (Mohr, Sengupta, & Slater, 2010; Sharma, Iyer, & Evanschitzky, 2008). Thus, the difficulty of selling within this environment, along with the need to overcome these uncertainties and risks were explored in-depth. This can only be done through social and value-oriented commitment and interactions between the salesperson and his customer (Ballantyne, 2004; Haas, Snehota, & Corsaro, 2012; Payne, Storbacka, & Frow, 2008). This

discussion on personal selling within this complex environment shows that this thesis fits in the relationship marketing context. Further elaboration of this subject is discussed under research objective 5.

This literature review was used to define the characteristics of a long-term salesperson-customer relationship with the three most often studied key psychological antecedents in the context of *demonstrating the salesperson's competence*, *protecting the customer's interests* and *maintaining integrity within the relationship* (Section 3.3.3, Figure 12).

> Research objective 3: To create a more detailed conceptual framework which combines the current knowledge of the psychological antecedents of salesperson-customer relationships with insights from the human reward system.

The purpose of this research objective was to define and to discuss the social domains of experience which combine the psychological antecedents of salesperson-customer relationships with the unconscious mind of the human reward system and their connection to potential reward responses (Chapter 4). In doing so and on the basis of the aforementioned literature review, the defined five social domains of experience, topical definitions, neurological associations and their equivalents in a salesperson-customer relationship were listed in a table and thus placed in the context of this study (Section 4.3.1, Table 7). Therefore, the relationship between these social domains of experience and the interpersonal reward situations produced in the customer's brain was conceptualised. More specifically, the elaborated conceptual framework showed how the black box of the customer's mind is conceptualised for this study. This elaborated conceptual framework was used to develop the questions for the interview guides and accordingly also formed the basis to set up the structured participant observation protocol.

A list of value criteria was used to identify the social domains of experience which were relevant for the context of this study (Section 4.2, Table 6). These value criteria must include the psychological antecedents of relationship quality which have the potential to address its components (trust, commitment, satisfaction) with cognitive, affective and conative dimensions (Section 3.3.3, Figure 12). Moreover, the value criteria must illustrate the connection between these dimensions (affective and cognitive) and the unconscious part of the human reward system (automatic social cognition system) (Carter, 2009), which has the potential to produce interpersonal reward situations in the customer's mind (Poore et al., 2012). This led to specific questions for situations within the salesperson-customer context. These questions were conceptualised and described with a general term. The description of these general terms resulted in the five social domains of experience to be investigated, namely: certainty, cooperation, fairness, autonomy and social status (Figure 23).

Some researchers in the field of salesperson-customer relationships have already known for some time that there are cognitive, affective and conative dimensions in these psychological antecedents, but they have lacked the tools to fully explore them and clarify the process by which they give rise to positive outcomes, e.g. Pryor, Malshe, and Paradise (2013), Bruhn (2013) and Wen et al. (2013). Social cognitive neuroscience (Lieberman, 2007; Ochsner &

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Lieberman, 2001; Rameson & Lieberman, 2009) provides us with these neuroimaging tools to shed further light on the dual process framework of the automatic (reflexive) and the controlled (reflective) social cognition systems (Dimoka et al., 2007; Lieberman, 2007; Satpute & Lieberman, 2006) and to better understand what happens in the brain when the salesperson interacts with his customer.

Figure 23: Evaluation of the Social Domains of Experience
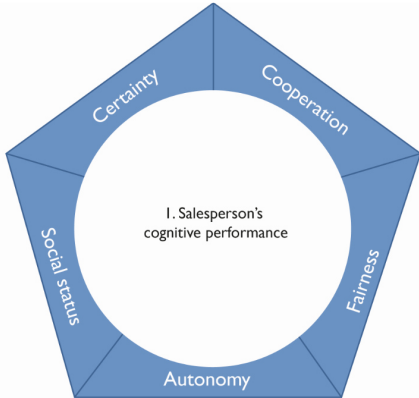
Source: Author

These automatic and controlled mechanisms obtain a simpler representation of the social processes, which means they may be able to give us a new perspective of how to integrate the customer's automatic social cognition system underlying the human reward system into existing salesperson-customer concepts. If this were the case, the salesperson could potentially integrate both the automatic and the controlled social cognition system into the development of salesperson-customer relationships, and learn more about the customer's unconscious mind during the development and maintenance of long-term salesperson-customer relationships in the process.

This elaborated conceptual framework was used as the basis of this research study to analyse and discuss the empirical data in Chapters 6 and 7. Some researchers have argued that the human reward system is often activated in salesperson-customer interactions and produces interpersonal reward situations in the customer's brain, e.g. Locander, Mulki, and Weinberg (2014) and Bateman and Valentine (2015). However, most salespeople are unaware that their customers' unconscious mind is involved. This is important knowledge for this study as it provided the foundation for the finalised conceptual framework with empirical insights which demonstrates how to create a window into the black box of the customer's mind.

Thus, we can conceptualise the relationship between the psychological antecedents of salesperson-customer relationships and the current understanding of the human reward system by including the explanation of the salesperson's cognitive performance, the social domains of experience, the automatic and controlled brain networks underlying the human reward system and the explanation of how interpersonal reward situations can be produced in the customer's mind. Consequently, salespeople will eventually be expected to unlock the

interpersonal reward situations in the customer's mind with their improved understanding of how the social domains of experience may relate to the automatic and the controlled social cognition systems.

Research objective 4: To explore how salespeople attempt to produce interpersonal reward situations in the customer's brain.

This research objective was set out to empirically investigate and explore the nature and importance of the social domains of experience introduced in Chapter 4, which appear to have the potential to activate the automatic and the controlled social cognition systems in the customer's brain. Chapter 6 analysed and discussed the context in which the empirical data was collected. In addition to that, it investigated the different pre-dominant selling styles of each of the participants, and explored the different responses received from the participating senior executive salespeople and high-level customers. It further explored the early stage of a salesperson-customer relationship and the beginning of the co-creation process. Chapter 7 analysed and discussed the various emerging topics and concepts which could potentially address the automatic and the controlled social cognition systems in the customer's brain. These analyses and related discussions provided valuable empirical evidence to complete the finalised conceptual framework for this study (Section 7.3, Figure 22).

The seller companies participating in this study can be classified according to the NACE Rev. 2 Codes (Appendices G and H) as providers of high-technology and medium-high technology products, and high-technology knowledge-intensive services (Section 6.2.1). This business environment is known for the development, the production and the distribution of complex and customised products and services, and for specific characteristics which influence the personal selling style of the salesperson (Madhavaram & Appan, 2010; Sharma et al., 2008). Each salesperson has a predominant selling style. Successful salespeople can utilise more than one selling style, depending on the sales situation (Häusel, 2015), to create customer value (Alamäki & Kaski, 2015; Haas et al., 2012). In the current study, five out of the 18 senior executive salespeople have a predominant '*knowledgeable*' selling style, seven a predominant '*collaborative*' selling style, four a predominant '*goal-oriented*' selling style and two a predominant '*sensitive*' selling style (Section 6.2.2). Depending on how a salesperson acts within a sales situation, he has the cognitive power to positively address the automatic social cognition system with his cognitive performance (Bargh, 1999; Chaiken & Trope, 1999; Lieberman, 2007; Poore et al., 2012). Therefore, it is important that both automatic as well as controlled social cognition processes are considered to improve understanding of personal selling because automatic processes play a major role in improving our understanding of how customers make purchase decisions (Kenning, 2014; Meckl-Sloan, 2015; Varshney, 2016). Figure 24 below shows how the salesperson's cognitive performance and predominant selling styles interconnect with each other.

Literature such as Haas et al. (2012), Alamäki and Kaski (2015) suggests that salespeople in discussions with their customers have two main tasks. Firstly, salespeople need to understand the customer within a short time and try to negotiate different business-relevant

aspects on the same wavelength and secondly, salespeople need to demonstrate the technical skills and competences required to successfully sell the products and services of the seller party.

Figure 24: Salesperson's Cognitive Performance and the Predominant Selling Styles
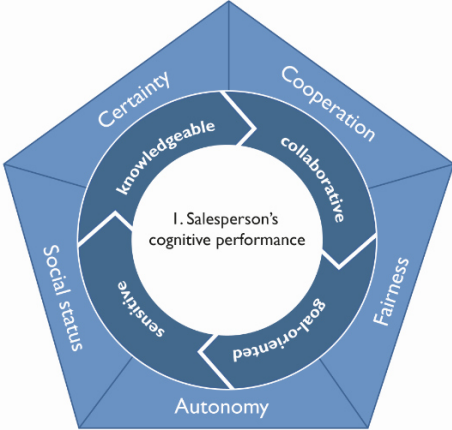
Source: Author

Therefore, customers want to deal with salespeople who are able to create value for them, who can help them to view their problem in factual terms, and who can give them emotional support to move toward a purchase decision (Ballantyne, 2004; Lusch & Vargo, 2006; Payne et al., 2008). The evidence from the current study shows that there are sales situations where the salespeople judge intuitively and without the awareness of the mind. This evidence supports Locander et al. (2014), who suggested that intuition and deliberation are both important aspects for the development of a long-term salesperson-customer relationship. This means that salespeople often cannot explain intuitively evaluated selling situations (Section 6.2.3). However, with the additional neuroscientific insights and with the evaluated five social domains of experience, they are given a possibility to explain such situations and interpret intuitively evaluated selling situations with the respective social domain of experience. In Figure 25, this evidence is incorporated into the conceptual framework, and it shows how intuitively evaluated selling situations relate to the respective social domain of experience.

Even though salespeople try to reduce potential doubts and to eliminate uncertainties as quickly as possible by acting transparently and disclosing all relevant information (Ingram, LaForge, Avila, Schwepker Jr., & Williams, 2008), this study suggests that salespeople can never be fully transparent with their information for technical- and business-related reasons. In the same vein, this study also suggests that salespeople often try to build on good experiences, but it is impossible to do it all the time because they do not always have all the required information to start a conversation which builds on positive experiences. Furthermore, empirical data shows that salespeople cannot always seek personal contact, and that they are not always able to recognise the customer's mental situation. The interview participants who failed to perceive the customer's mental situation argued that

they are unable to do so because they do not experience it in the same manner as the customer does.
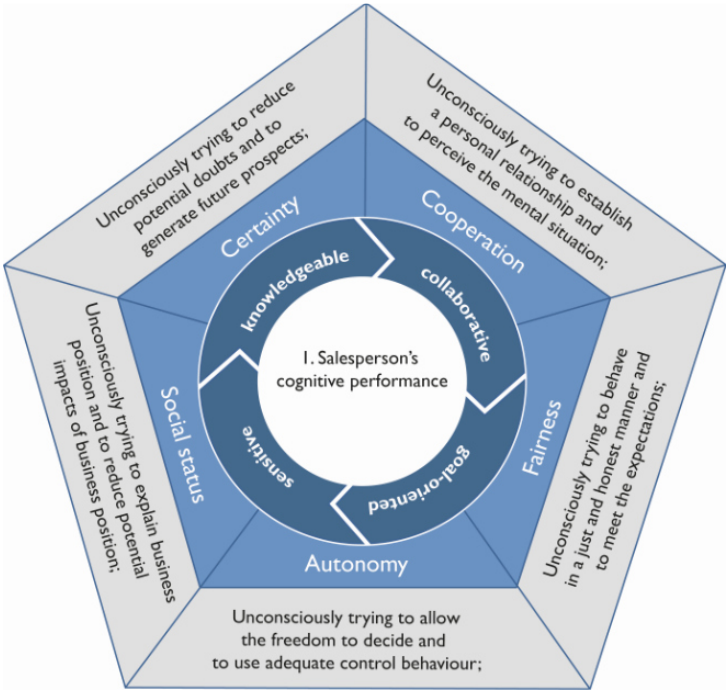
Additional empirical findings show that salespeople cannot always be just and honest in their dealings because there are situations where the salesperson cannot make promises, be generous or obtain satisfaction due to factors such as technological uncertainty, market uncertainty, competitive volatility, which is in line with what Sharma et al. (2008) and Mohr et al. (2010) highlighted in their study about high-technology business. Evidence from this study shows why salespeople do not always experience openness on the customer's side in sharing information because of the information is simply not yet available. The empirical findings show that salespeople do not always want the customer to decide. Vice versa, some customers do not always exactly know which specifications are required for their particular type of complex and customised product or service. The customer may also not have sufficient technological knowledge to decide, or want to delegate the responsibility (Hui, Molden, & Finkel, 2013; Taghavifard, Damghani, & Moghaddam, 2009). In such situations, the freedom to decide is not always given. Additional empirical evidence shows that salespeople are not always able to disclose their business position and that they do not always try to improve the customer's business position. Figure 26 below summarises these empirical findings discussed in Sections 7.2.x.1 and 7.2.x.2, and incorporates them into the conceptual framework below.

Further empirical data was gathered from senior executive salespeople and high-level customers within the high-technology B2B sector with complex and customised products and services to gain a full perspective of managerial-level insights. Five topics and their

related concepts could be defined (Sections 7.2.1 – 7.2.5), which relates to the introduced social domains in Chapter 4.

Figure 26: Certain Variations between the Ideal and the Reality
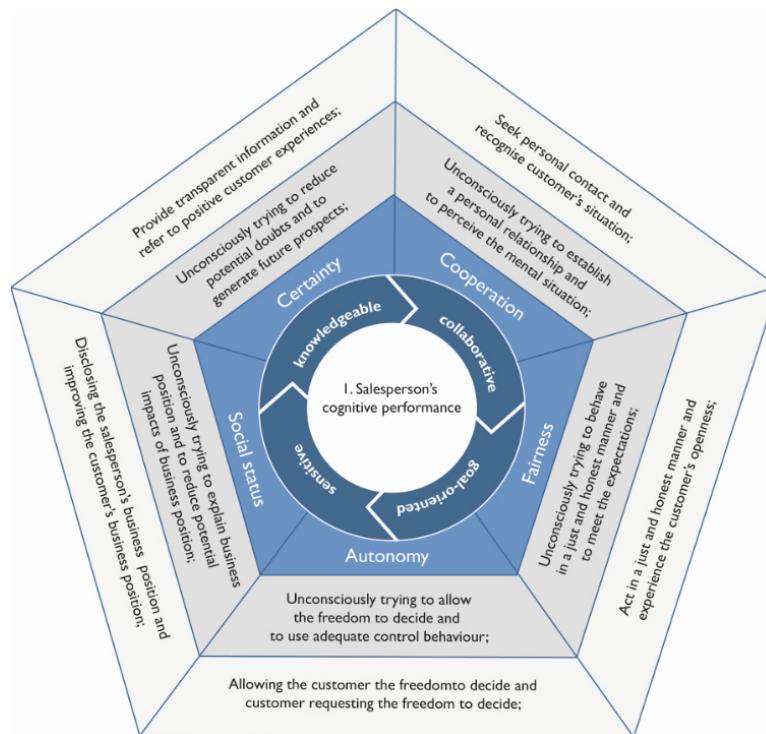
Source: Author

The topics and their connections to the social domains are: 1) *creating a sales situation with sufficient relevant information*, which relates to the social domain of certainty; 2) *recognising the customer's personal interests and mental situation*, which relates to the social domain of cooperation; 3) *treating customers in a just and honest manner*, which relates to the social domain of fairness; 4) *giving the customer the perception of control and having choices*, which relates to the social domain of autonomy; 5) *participating and interacting actively in sales conversations*, which relates to the social domain of social status. In Figure 27 below, this empirical evidence is incorporated into the conceptual framework. A more detailed view of the topics and concepts is shown in Section 7.3, Figure 22.

During the analysis of the interview data, the researcher noticed that the participants frequently emphasised the importance of the early phase of a salesperson-customer relationship in the sales process (Section 6.2.4). This finding is also supported by Weber, Malhotra, and Murnighan (2005), who noted that an interpersonal relationship is most likely to start when the salesperson does not focus solely on the monetary benefits, but rather is willing to take a risk and accept this risk. The researcher discovered that the social domain of certainty is one of the most essential during the initial phase. Based on this evidence, three structured participant observations were obtained. The findings show that the early stage of a salesperson-customer relationship is used by the salesperson to get to know the customer's preferences and to establish a basis for dialogue. Furthermore, the salesperson

tries to establish a close bond with the customer and to see how he really behaves and reacts.

Figure 27: Emerging Topics and their Related Concepts
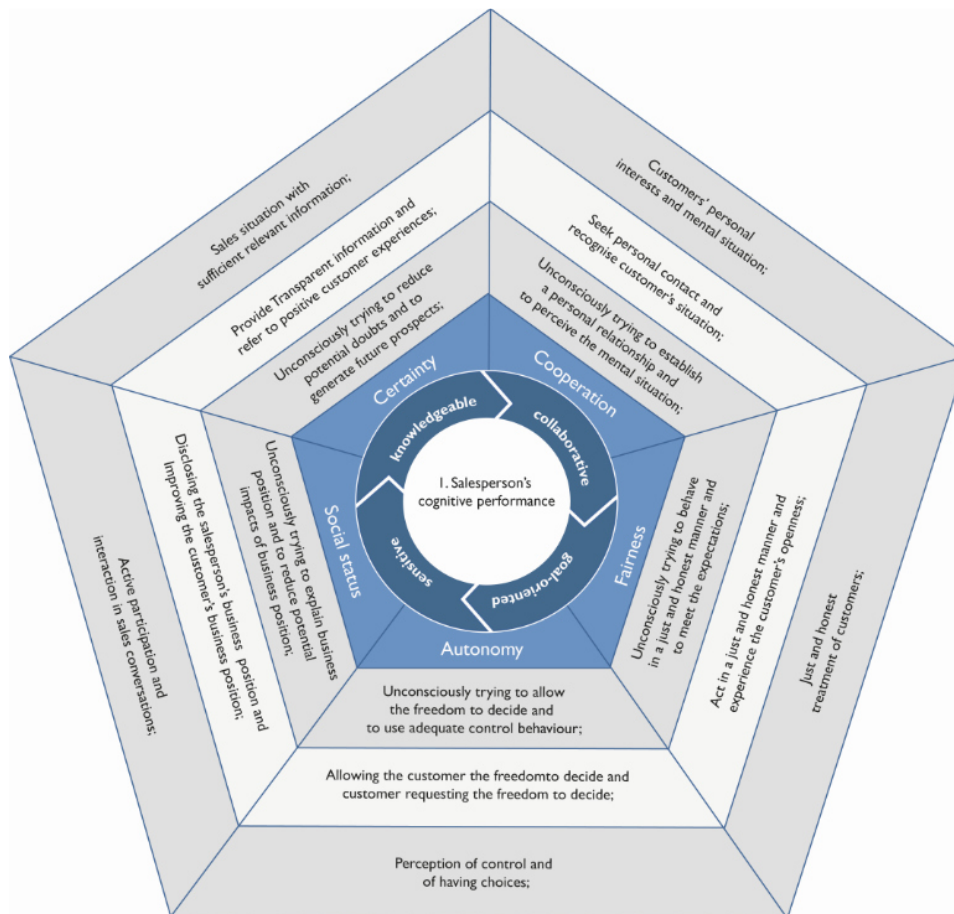
Source: Author

In addition to that, this early stage is used to understand the business processes, relevant technologies and the customer's objectives. Finally, it is used to start co-creation and to invite the customer to participate in every phase of the sales cycle. This supports the findings of Grönroos (2008), who noted that the final solution is co-created rather than by only one side. All these empirical findings together resulted in the finalised conceptual framework (Section 7.3, Figure 22).

> Research objective 5: To present a finalised conceptual framework which synthesises the insights from the literature with the empirical findings, and to discuss the contributions and the implications for managers and sales staff.

The research objective was to present the finalised conceptual framework, which conceptualises the window into the black box of the customer's mind (Figure 28). In specific terms, it integrates the salesperson's cognitive performance and his predominant personal selling style. Furthermore, it integrates the five social domains of experience introduced in

Chapter 4 and the three layers of the empirical findings from the analysis of the face-to-face interviews executed with the 22 senior executive salespeople and high-level customers.
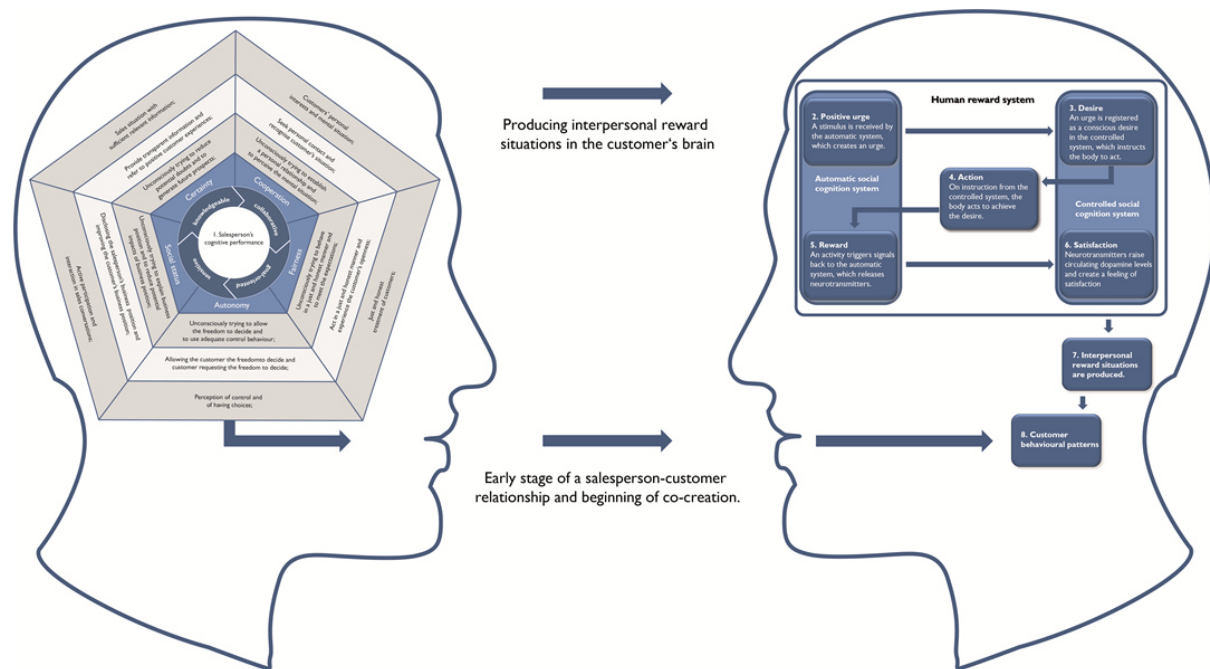
Source: Author

Finally, it integrates the findings from the three structured participant observations (Chapters 6 and 7). The findings are discussed in relation to B2C, B2B, high-technology and social cognitive neuroscience literature. Specific connections with the human reward system and how this potentially operates in the customer's mind are highlighted. This clarifies how interpersonal reward situations may be produced, which in turn could help salespeople to achieve important customer behavioural patterns such as purchases, repurchases and positive WOM.

The findings of this study reinforce existing salesperson-customer relationship concepts; moreover, the findings compiled into the finalised conceptual framework potentially represent a new way to achieve a high-quality relationship between the salesperson and the customer. This is mainly due to the fact that relationship quality is an overarching construct which consists of several different components (François & Van Goolen, 2005), and that high-quality relationships result from elevated levels of trust, commitment and satisfaction (Wulf et al., 2001). Thus, topics and concepts depicted in the finalised conceptual framework are clustered in the five social domains of experience which may possibly activate the human reward system and produce interpersonal reward situations as a result. These could potentially strengthen existing dimensions of the relationship quality (Section 3.3). If this is the case, it would contribute to a high-quality relationship between the salesperson and the customer in the high-technology B2B sector with complex and customised products and services in Central Europe.

This conceptual framework provides an insight into the process of building salesperson-customer relationships, which focuses on the human reward system and the way in which salespeople can use the five social domains of experience to better understand reward situations in their customers' minds and perhaps achieve positive relationship outcomes and desired customer behavioural patterns as a result. The conceptualisation of relationship marketing was illustrated in Section 3.3, Figure 9. It includes the activities of planning, managing and controlling relationship marketing as well as the possible psychological effects on the customers. These effects are presented in this study as psychological antecedents with cognitive, affective and conative dimensions. Furthermore, this conceptualisation contains the behavioural consequences, which are presented in this study as purchase and repurchase intentions and as positive WOM. Thus, the window into the black box of the customer's mind adds a new perspective of how the salesperson with his cognitive performance could achieve the desired customer behavioural patterns.

The finalised conceptual framework is a further tool to help managers and sales staff gain additional insights into the role that the human reward system plays in the development of a long-term salesperson-customer relationship. It also clarifies how the social domains of experience relate to existing salesperson-customer concepts. Furthermore, this framework may aid salespeople in improving their sales techniques in salesperson-customer relationships, which in turn may improve the quality of their relationship with their customers and finally result in more purchases, repurchases and positive WOM in the long term. The full contributions of this study will be discussed in detail in Section 8.4.

8.4   Contributions of this Study

Previous studies have investigated the application of insights from social cognitive neuroscience to strategy (Powell, 2011), to leadership (Rock, 2011), to economy (Meckl-Sloan, 2015) or to consumer marketing (Kenning, 2014; Varshney, 2016), for example. However, few, if any, studies have investigated the application of these insights to salesperson-customer relationships. This is a significant omission because there is some indication that these insights from social cognitive neuroscience have the potential to provide sales personnel with additional knowledge of how a salesperson-customer relationship can be established, developed and maintained. Therefore, this study intends to make a significant contribution to the body of knowledge on the development of salesperson-customer relationships within the research field of relationship marketing. In doing so, it introduces new constructs (*social domains of experience*) to explore sales relationships and to reflect on the role and the value of applying insights from social cognitive neuroscience to these relationships. As a result, this study offers a complementary perspective of the factors that contribute to relationship development and maintenance and it reinforces previous research into salesperson-customer relationships. However, there are some limitations which must be considered while investigating the application of insights from social cognitive neuroscience to sales relationships. They are driven by the

idiosyncratic aspects of the salesperson-customer relationship such as context, product characteristics, the nature and experience of the involved parties, as well as the parties' social characteristics and community of origin or gender and age.

Social cognitive neuroscience is a nascent field of research which has the potential to introduce some interesting insights into salesperson-customer relationships. These insights focus mainly on the affective and cognitive dimension of existing concepts, which have been investigated in-depth in the past by salesperson-customer relationship researchers, but have reached their limits. Therefore, social cognitive neuroscience may possible add a complementary dimension to these existing concepts. For example, the customer's cooperative (Swan, Bowers, & Richardson, 1999) (Section 3.3.2.1) or loyal behaviour (Stahl, 2009) (Section 3.3.2.2), etc. could be complemented with new insights from the human brain to give researchers an alternative approach to continue to push the boundaries and better understand salesperson-customer interactions and the customer's unconscious mind during the decision-making process as a result. Although the application of research results from social cognitive neuroscience seems to be very promising for salesperson-customer research, there are several limitations. On the one hand, there are reservations about the participants' data accuracy and on the other about the neuroimaging technologies used in existing studies which must be taken into account when doing so (Hammou, Galib, & Melloul, 2013; Mileti, Guido, & Prete, 2016). Furthermore, there are limitations within this study in regard to the influence and the role of the social domains of experiences, which may vary by context, product or salesperson and customer characteristics (Mullins, Ahearne, Lam, Hall, & Boichuk, 2014). Despite these limitations, this study has uncovered some interesting new constructs (social domains of experience) which seem to positively influence the human reward system. These social domains of experience could provide a medium through which to integrate previous studies and existing salesperson-customer concepts. Furthermore, they offer to investigate the circumstances of situations which illuminate the operation of a certain human brain areas while a salesperson interacts with his customer. As a result, it might be interesting to look at the interaction between a person's situational characteristics and the respective social domain of experience and how they may vary in future studies. This could be a very interesting avenue for further research that could potentially allow different research techniques to be applied to the existing interviews, observations and focus groups to study sales relationships. However, this stage has not been reached yet and the application of neuroscientific findings to salesperson-customer relationships must be researched in greater depth before these findings can be integrated and applied without any restrictions.

The findings of this study compiled into the finalised conceptual framework provide strong evidence that the salesperson not only serves as the most important interface between buyer and seller organisations (Bradford, Crant, & Phillips, 2009; Swan et al., 1999) but is also the most important person to build and to maintain the relationship with the customer. At the beginning of the relationship, this role includes the creation of a close attachment, which is followed by spending time together with the customer one-on-one to foster their interpersonal relationship. Next, the salesperson's role is to intertwine identities and their

respective roles and to build up interdependent emotions, thoughts, and behaviours to set up a relaxed sales environment. Afterwards, the salesperson must meet the customer's personal needs and be a source of social support. However, if there is a loss of social support, a feeling of personal guilt, fear, anxiety and depression, the salesperson needs to be able to handle these obstacles to start building a relationship. Thus, he must function as a relationship builder with his customer and address the numerous resulting emotional challenges. Therefore, it is clear how the findings of this study will contribute to a better understanding of the various roles that the salesperson holds within the sales cycle and when building and maintaining the relationship with the customer. This improved understanding of the various roles may contribute to a stronger and more collaborative setup between a salesperson and his customer, where the salesperson functions as a partner, a coordinator and a problem solver (Winkelmann, 2008). This in turn may help salespeople to achieve important outcomes such as increased purchases, repurchases and positive word-of-mouth (WOM). As stated by Ahearne, Jelinek, and Jones (2007), a better understanding of the cognitive processes underlying the human reward system may result in competitive advantages over other salespeople or sales organisations.

Beyond this, this study is one of first to investigate the application of insights from social cognitive neuroscience to salesperson-customer relationships. There is evidence that the development of salesperson-customer relationships is dependent on the salesperson's personal selling style and how he behaves in cognitive terms in front of the customer (Section 6.2.2). This means that the salesperson with his cognitive performance has the potential to create psychological effects in the customer's mind which have a major impact on the customer's cooperative, loyal and referral behaviour (Palmatier, 2008). The salesperson's cognitive performance is dependent on how he manages his personal selling style. For example, the style in question could be knowledgeable, collaborative, goal-oriented or sensitive, or a mixture of the aforementioned at any one time. As argued by Häusel (2015), salespeople in general have one predominant selling style, but successful salespeople can combine various selling styles depending on the sales situation. This combination of selling styles adds value during salesperson-customer interactions (Alamäki & Kaski, 2015; Haas et al., 2012). However, the crucial factor is the salesperson's personal selling style and how he integrates it into his communication with the customer, as this could have an effect on the unconscious part underlying the human reward system in the customer's mind. Therefore, this study provides a basis with which to integrate the salesperson's cognitive performance, which is dependent on his personal selling style and the human reward system.

Previous research has demonstrated that the relationship quality and its components of trust, commitment and satisfaction (Beatson et al., 2008; Dwyer, Schurr, & Oh, 1987; Morgan & Hunt, 1994; Rauyruen & Miller, 2007; Storbacka et al., 1994) contribute to the description of the characteristics of a long-term salesperson-customer relationship (Brashear, Boles, Bellenger, & Brooks, 2003; Newell, Belonax, McCardle, & Plank, 2011) (Section 3.3.1). This study is designed to be the first to create a window into the black box of the customer's mind which can be incorporated into these relationships via the five social domains of experience and therefore apply the additional neuroscientific perspective to the

existing environment ([Section 1.2](#), [Figure 1](#)). This study also attempts to go further by introducing the idea that each of the social domains of experience could improve the quality of the relationship between the salesperson and the customer. This is mainly due to the fact that the concept of relationship quality is an overarching construct which consists of several different components (François & Van Goolen, 2005), and that high-quality relationships result from elevated levels of trust, commitment and satisfaction (Wulf et al., 2001). A high-quality relationship can be developed with positive interactions during the dialogue between a salesperson and his customer (Boles et al., 2000; Cullen, Johnson, & Sakano, 2000; Weber et al., 2005) and beyond that, as this study showed, and also with interpersonal reward situations. Thereby, salespeople must be able to better understand the different, often intuitively judged sales situations (Randolph, Borders, & Loe, 2013), each of which seems to be interpreted with one of the five social domains of experience ([Section 6.2.3](#)). This study provides evidence that salespeople are often unable to explain such situations. It also links various empirically emerging intuitively evaluated selling situations to one of the social domains of experience. This is why the social domains of experience are essential in salesperson-customer interactions and why a high-quality relationship could result. It seems that the social domains of experience provide the salesperson with an explanation of how interpersonal reward situations may be produced in the customer's brain and what the salesperson potentially needs to do in the various customer contact situations to positively interact with the customer.

Furthermore, the salesperson needs to have a broader understanding of the early stage of a salesperson-customer relationship and the beginning of the co-creation process (Haas et al., 2012) because the initial stage of a relationship is crucial for its success. By addressing this issue, this study offers salespeople a potential avenue to greater success. He can do so by reducing the existing uncertainties which are present in an initial stage and by providing the customer with sufficient relevant information ([Section 6.2.4](#)). The researcher provides clear evidence that the early stage of a salesperson-customer relationship is used by the salesperson to get to know the customer's preferences and to establish a basis for dialogue. Furthermore, the salesperson tries to establish a close bond with the customer and to see how the customer really behaves and reacts. In addition to that, this early stage is used to understand the business processes, technologies, and customer objectives and for prospecting and to pre-approach the customer. Finally, this early phase is used to understand the customer value and to invite the customer to participate in every phase of the sales cycle to be part of the final solution of the complex and customised product and service. The resulting findings from this study make the early stage and the start of the co-creation process more understandable for technical salespeople.

Finally, this study contributes empirical findings to the theoretical assumptions of various researchers in the field of neuroscience, such as Dimoka et al. (2007), de Oliveira, Giraldi, and dos Santos (2014), and López, López, and Ayala (2016). In doing so, it adds value to the understanding of these theoretical assumptions. In addition to that, it contributes to the co-creation process between a salesperson and his customer ([Section 3.4.2](#)). Value is predominantly created when the customer participates in a collaborative setup with the

salesperson and the seller company. If the customer is involved as a co-creator and his skills and knowledge are integrated, this leads to unique competitive advantages (Zhang & Chen, 2008). This means that the co-creation process is highly dependent on the behaviour of the salesperson and the customer, and how these two parties work together and exchange experiences (Prahalad & Ramaswamy, 2004). The empirically emerging topics and concepts: *creating a sales situation with sufficient relevant information, which relates to the social domain of certainty*; *recognising the customer's personal interests and mental situation, which relates to social domain of cooperation*; *treating customers in a just and honest manner, which relates to social domain of fairness*; *giving the customer the perception of control and of having choices which relates to social domain of autonomy*; and *participating and interacting actively in sales conversations, which relates to social domain of social status* (Sections 4.2.1 – 4.2.5 and Sections 7.2.1 – 7.2.5) support existing studies in the field of salesperson-customer relationships. Hence, these findings support Grönroos (2008)'s suggestion that the salesperson become partners within the sales cycle in respective positions of facilitator and value creator. This in turn may have a flow-on effect to sales techniques and salesperson-customer interactions, i.e., salespeople could become more efficient and sell their products and services more effectively within the sales cycle (Hsu, 2016). Consequently, these additional insights may help salespeople to achieve important outcomes such as increased purchases, repurchases and positive WOM, which are also referred to in this study as customer behavioural patterns (Section 3.3), and they highlight promising areas for further research.

8.5   Implications for Managers and Sales Staff

The findings of this study compiled into the finalised conceptual framework (Section 7.3, Figure 22) highlight the significant role that the technical salesperson and the human reward system play in the entire sales process. Therefore, sales managers are provided with additional insights into the sales process which they can convey effectively and efficiently to their sales teams because sales managers are ideally positioned to encourage their staff to sell more successfully. In line with Zakrzewska-Bielawska (2010), the senior executive sales personnel and high-level customers participating in this study indicated that the high-technology environment with its complex and customised products and services is one of the most complex market in terms personal selling as it requires highly educated salespeople with in-depth communication skills who are able to develop a close relationship with their customers. While this market generates a business environment with very specific characteristics, which in turn affects the seller company and has implications for their sales personnel, this study provides evidence which could help sales managers to improve the personal selling style of their sales staff (Section 6.2.2). It may also allow us to better understand and interpret intuitively evaluated selling situations (Section 6.2.3), the early stage of a salesperson-customer relationship as well as the beginning of the co-creation process (Section 6.2.4). This co-creation process offers indications that salespeople establish and develop positive relationships with their customers via the five social domains of experience

of certainty, cooperation, fairness, autonomy and social status and their empirically emerging topics and concepts (Sections 7.2.1 – 7.2.5).

Accordingly, the findings of this study and the resulting implications may be of interest for sales managers who are in a position to complement their sales strategies to better understand the development and maintenance of a long-term salesperson-customer relationship. The findings can be incorporated into the various customer oriented strategies such as customer acquisition strategy, customer loyalty strategy, customer recovery strategy and relationship termination strategy in general terms and the empirically emerging topics and concepts in specific terms (Bruhn, 2013) (Section 3.3). With the implementation of these topics and concepts in the various sales strategies, sales managers could potentially help their sales staff to be even more focused on target markets and customers. This in turn may result in time savings and in higher revenues as well because only priority markets and their customers are served. Furthermore, the sales staff may gain a strategic and competitive advantage over their competitors in the field as a result.

The clustered topics and concepts may be incorporated into the sales managers' controlling instruments. The findings indicate that these are an ideal complement to the preliminary economic determinants which could be cognitive (willingness to take risks, reputation), affective (satisfaction, trust, loyalty), and conative (cross-buying-intention, re-purchase intention) in nature (Matthews, Son, & Watchravesringkan, 2014; Palmatier, 2008; Pryor et al., 2013). The implementation of the topics and concepts provides sales managers with initial indicators of how a customer views the seller company, the products as well as to the appropriate salesperson. By using these topics and concepts and reporting the feedback on the sales controlling instruments in a systematic manner, the results may hint at a certain pattern which indicates whether a deal will be finalised soon or postponed. It could also provide insights into the budget situation and allow the technical knowledge and the performance of the salesperson to be more easily assessed. This information would certainly help sales managers to judge the performance of their sales staff and where exactly the project is within the buying process that companies lead customers through when purchasing products.

The emerging topics and concepts are based on salesperson-customer research and on neuroscientific insights into the human reward system, so they are designed to build up long-term salesperson-customer relationships. If these topics and concepts were incorporated into a sales controlling instrument, this may help companies to develop a remuneration plan for their front-end sales staff. Such compensation plans would avoid short-term transactional selling, thereby placing the focus more on long-term relationship selling and assessment of the relationship quality. In transactional selling, the focus lies solely on the product, whereas in relationship selling both the product and the customer interaction are focal points (Grönroos, 1994, 2007; Gummesson, 2002). These findings of this study seem to suggest that the individual salesperson could adapt his behaviour and focus more on interactions with his customers, which may see the development of a long-term salesperson-customer relationship. Here, Ingram et al. (2008) refer to the sales dialogue with the customer. When

viewed over time, it could potentially have a positive effect on the relationship quality between a salesperson and his customer.

In addition to that, salespeople could be recruited and trained on the basis of these topics and concepts characterising the social domains of experience. According to Ingram et al. (2008), the customer always asks himself certain value questions such as: Is the salesperson reliable? Does the salesperson understand my business and my sector? Will the salesperson help me to save money? Is the salesperson able to help me to achieve my strategic priorities? Is it possible to work easily with the seller company? If sales personnel were recruited and had training in these areas, this may improve the relationship quality between salespeople and their customers. The answers to these questions may offer clues into how a salesperson behaves in the field in front of a customer and allow goal-oriented salespeople to be hired instead of salespeople who do not have the skills and qualities that fit the strategy. Therefore, there would be clearer indications as to when a salesperson should not be hired or when a salesperson should be dismissed.

Furthermore, one of the most important managerial implications stems from the realisation that the elicited topics and concepts integrated into the five social domains of experience offer neuroscientific insights into the customer's mind. Consequently, salespeople may learn more about the customer's unconscious mind and his decision-making process. For example, nearly all of the participants interviewed as part of this study were interested in the result as they had never considered salesperson-customer relationships from an applied neurological perspective. In addition, and as evident from the empirical findings, front-end salespeople with their cognitive performance potentially play a leading role in producing interpersonal reward situations in the customer's brain. These rewarding situations could lead to the development of long-term salesperson-customer relationships and consequently to increased economic success for companies with complex and customised products in their portfolio in the B2B sector in Central Europe. Thus, this economic success is again important for sales managers and senior executives to provide them with a powerful tool for the future, and it may allow them to quantify the relationship quality between the salespeople and their customers.

In conclusion, the finalised conceptual framework integrates well established salesperson-customer concepts and new insights from social cognitive neuroscience via the newly introduced five social domains of experience. The empirically emerging topics and concepts show how salespeople could better understand their role as relationship builders in the process of developing and maintaining a long-term relationship with their customers. This in turn would potentially help salespeople to achieve important outcomes such as increased purchases, repurchases and positive WOM. Thus, these topics and concepts may contribute to best practice behavioural guidelines to help sales managers and their sales staff to be even more successful with their existing as well as new customers. The following guidelines are presented in such a way that (1) the salesperson's cognitive performance, (2) the findings from the intuitively evaluated selling situations and (3) the automatic and the controlled social cognition systems (4) the topics and concepts characterising the social domains of experience, and (5) the additional emerging empirical insights into the social domains of

experience are reflected. These guidelines could be further broken down by the sales managers to specific contextual sales situations.

1. *INNOVATOR: Manage sales staff in a results-driven rather than in an activity-driven manner.* Sales managers tend to be too activity-driven and neglect the results. By doing so, salespeople feel restricted and cannot reach their full cognitive potential. When they are hired, sales staff should already have the required skills and prerequisites which are needed to sell complex and customised products and services. Therefore, sales managers must focus more on the strategic results and leave the method of how to achieve the goal to the salespeople. This will allow salespeople to develop their personal selling behaviour (Section 6.2.2) and with their cognitive ability, they would be able to improve their communication style within their interactions with their customers and therefore apply the social domains of experience as a guiding and specific framework.

2. *TIMEKEEPER: Manage sales staff effectively to allow them to spend time with the customer.* To sell successfully, salespeople must spend time with their customers. Sales managers are therefore requested to reduce administrative duties for salespeople to a minimum, which are not directly related to revenue generation and therefore to the primary task of a salesperson. The more time salespeople spend with their customers, the more the intuitively evaluated selling situations (Section 6.2.3) become clearer, which they are usually not able to explain if they do not spend time with customers. If they had a better understanding of intuitively evaluated sales situations, salespeople may in turn be able to apply their sales techniques to better effect and thereby achieve important outcomes such as increased purchases, repurchases and WOM.

3. *LEADER: Manage sales staff as a leader and by example.* To win profitable customers and to start the co-creation process (Section 6.2.4), the sales staff must know high potential customers and how to approach them. The sales manager plays a central role in the evaluation of high potential customers. Among others, it part of his duties to define the customers to be approached and therefore to help generate opportunities for his sales staff. As a leader, the sales manager must be able to establish, develop and maintain key customers and thereby support his sales staff. Human knowledge and behaviour are central. Therefore, the sales manager must understand the influence that the human reward system may have on the development and maintenance of a close relationship with the customers.

4. *MOTIVATOR: Manage sales staff effectively and communicate consistently.* Many sales managers are too revenue-driven and thereby forget that revenue is only a consequence of the motivation of their sales staff. They can raise the latter's

motivation by communicating clear expectations, controlling various steps in the sales process and giving constructive feedback. The social domains of experience (Sections 4.2.1 – 4.2.5) and their topics and concepts (Sections 7.2.1 – 7.2.5) serve as a reliable source to communicate clear expectations. These social domains of experience define *"what"* salespeople need to do as well as the *"how"* they need to do it to optimise their communication with the customer to potentially achieve an important advantage over their competitors.

5. *COACH: Manage sales staff individually to encourage the best results.* Salespeople should be in continuous contact with existing and potential customers. They need a primary and therefore individual selling style, and success results from personalised communication with their customers. Sales managers are responsible for coaching their salespeople to improve their primary selling style. In communicating with their customers, the interpersonal values are crucial if the salesperson is to successfully sell the complex and customised products and services. Therefore, sales managers must convey the following values during the sales process: transparency with information and create positive customer experience (Sections 7.2.1.1 and 7.2.1.2), seeking personal contact and recognise the customer's personal situation (Sections 7.2.2.1 and 7.2.2.2), behaving in a just and honest manner in front of the customer (Sections 7.2.3.1 and 7.2.3.2), allowing the customer to freely decide (Sections 7.2.4.1 and 7.2.4.2), and giving attention to the customer's business position (Sections 7.2.5.1 and 7.2.5.2).

In conclusion, the sales manager plays various roles during the whole sales process to get the best from his sales staff. The sales manager is an innovator, a timekeeper, a leader, a motivator and a coach in one.

8.6   Limitations and Further Research

By integrating well established salesperson-customer relationship concepts and insights from social cognitive neuroscience via five newly introduced social domains of experience, this study offers the potential for further research, but at the same time, it also contains some limitations. These are driven by the idiosyncratic nature of the salesperson-customer relationships between the study participants and on the other hand, by the techniques that neuroscientists use nowadays while they are performing their experiments on humans or animals. It is clear that the business context, products, characteristics of the companies in which the participants are employed, nature and experience of the involved parties, social characteristics and community of origin of the participants or gender and age will have all had a significant impact on the findings of this study. These are all factors which were not taken into account while choosing the representative senior executive salespeople and high-

level customers (Mullins et al., 2014). Despite these limitations, this study uncovered some interesting new social domains of experience which could potentially influence the human reward system. Therefore, future research could perhaps explore the interaction between a person's situational characteristics and the respective social domain of experience and how they may vary.

As already noted in Sections 1.1 and 1.5, and as framed during the literature review (Section 2.2.1), the application of insights from social cognitive neuroscience seems very promising for salesperson-customer research (Hammou et al., 2013; Javor, Koller, Lee, Chamberlain, & Ransmayr, 2013) and for salesperson-customer relationships in particular (Randolph et al., 2013). However, this new research field with its techniques and methods has numerous limitations. For example, the high cost of the equipment and the resulting high cost of the sample measurements, both of which make it impossible to provide a representative number of samples. Furthermore, the complexity of the laboratory setup and therefore the artificial environment during the experiments as well as the ethical controversy which is present within this context must be considered (Daugherty & Hoffman, 2017; Meckl-Sloan, 2015; Mileti et al., 2016) (Section 2.2.1). Since no neuroimaging experiments were carried out within the scope of this study, these limitations only have an indirect influence on the results. This is because material is drawn from B2C, B2B and high-technology literature, and neuroscientific literature is used supportively to better understand the customer's unconscious mind during the decision-making process. With excerpts from this literature and with empirical data from the high-technology sector, a finalised conceptual framework was developed to help researchers to better understand how long-term salesperson-customer relationships are developed and maintained. However, speculation exists on how the direct research data was generated and evaluated before being applied to this study. Despite this, further research could be carried out on the basis of this study to investigate the link between the social domains of experience and the automatic social cognition system (unconscious part of the human brain) underlying the human reward system (Section 4.3.1, Figure 15). This would allow further insights into the activation of the limbic system or specific brain areas (Section 2.2.2, Figures 4 and 5) and into the empirically emerging topics and concepts (Sections 7.2.1 – 7.2.5).

In this context, there is another limitation regarding the automatic social cognition system of the human reward system which emerged from the discussion on data quality in Section 5.7.7. Namely, the researcher of this study tried to infer unconscious processes through interviewing. This arose as follows: Chapter 4 conceptualised that the social domains of experience of certainty, cooperation, fairness, autonomy and social status (Sections 4.2.1 – 4.2.5) activate the automatic social cognition system. For this purpose, insights from social cognitive neuroscience, its application to marketing and relationship marketing literature in general and salesperson-customer relationship concepts in specific were explored. On this basis, the interview questions and the criteria for assessing the observations were defined and subsequently empirical data collected. This resulted in specific topics and concepts for each of the social domains of experience, which emerged from the systematic literature review process. This is problematic because the obvious activation of the unconscious

process is not directly tested with neuroimaging tools, but instead derived from the literature review. It also suggests possible rather than scientifically proven activation of the unconscious parts of the human reward system. Nevertheless, the resulting finalised conceptual framework (Section 7.3, Figure 22) provides a basis for further neuroscientific research to test this unambiguity. This means the emerging topics and concepts could be investigated more closely and tested in a neuroscientific environment. Accordingly, if specific parts of the unconscious mind are activated, as suggested within this thesis, the link between the concepts and the automatic social cognition system would be unambiguous and confirmed.

This study is cross-sectional in design as the data is collected at one point in time by conducting a single interview on the subject (Diekmann, 2011). This design did not provide an insight into how a long-term salesperson-customer relationship develops, even though the interviewed participants had developed long-term relationships with each other. Rather, the researcher of this study was only able to include the experiences of the interviewed participants and the observed initial meetings. Therefore, future research could be set up with a longitudinal research design so that further empirical study could be conducted into the development process of a relationship. The starting point for this longitudinal research is given with the three initial salesperson-customer meetings observed by the researcher. These meetings could be followed up in further phases. Researchers will then have the possibility to investigate how cooperation, fairness, autonomy or social status evolves over time. In the same vein, the research study's sample selection (Section 5.7.1) is limited to one industry and one geographical area only, i.e. the high-technology B2B sector with complex and customised products and services in Central Europe. There has been no validation of the findings in other industrial environments yet, so it cannot be said that the same findings would not have been achieved in other industrial environments than in the high-technology B2B sector. Therefore, this limitation offers potential opportunities for further research in other industries and other geographical areas, not only in the high-technology B2B sector with complex and customised products and services in Central Europe.

Since this study is one of the first to apply insights from social cognitive neuroscience to the field of salesperson-customer relationships, a possible limitation is the lack of prior research studies on the topic. This is partially in line with Agarwal and Dutta (2015)'s research paper on consumer marketing. They stated that the lack of knowledge of the human brain currently prevents researchers and practitioners from conducting more in-depth investigations than they have carried out to date. Consequently, this study could not be built up on any existing knowledge. Instead, all knowledge on the basis of social cognitive neuroscience and its application to the field of salesperson-customer relationships had to be gathered with the help of the social domains of experience. Therefore, this study contributes valuable knowledge to a relatively new field. However, by being one of the first to do so, it should encourage other researchers to take advantage of the findings of this study and motivate them to develop further research questions on this topic.

Finally, further research could be done into each of the specific social domains of experience. At the time when the five social domains of certainty, cooperation, fairness, autonomy and

social status emerged from the synthesis of the literature review (Chapter 4), they were viewed as separate, independent social domains. The human reward system in particular is a composite of brain regions with nerve cells that are controlled by neurotransmitters, so further neuroscientific research will help us to better understand these five social domains. To date, there is evidence from neuroscientific research (Dimoka et al., 2007; Ochsner et al., 2009; Satpute & Lieberman, 2006) that the social domains are interconnected and interact with each other. In some cases, the same brain regions are activated for different social domains. Therefore, the findings lead to a new set of questions which could be asked in the research fields of salesperson-customer relationships. For example: which social domain influences the customer's unconscious mind the most, and the least? And what effects does a salesperson's cognitive performance have on the development of a long-term salesperson-customer relationship?

Despite these limitations, this study provides a holistic overview as well as detailed insights into how functional neuroimaging techniques have the potential to add a new dimension to existing salesperson-customer relationship concepts. Researchers and practitioners will have further information about the customers' thought processes and their unconscious mind during the decision-making process, and an improved understanding of these areas could in turn engender relationship marketing and sales approaches. Therefore, research with this emergent technology must continue to enrich academia to allow more in-depth managerial implications and to identify promising new avenues for future research.

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APPENDICES

Appendix A: Interview Guide for Salespeople

The following interview guide was used for the 18 face-to-face interviews with the senior executive salespeople (Table 47). The interview procedure is described in Section 5.7.2. Firstly, the participants were briefed on the focus and aim of the study. Secondly, the conversation was started with Questions 1 and 2, which were general and open respectively. Thirdly, the researcher made sure that the flow of the conversation was maintained by taking care not to interrupt the interviewee. Questions 3, 4, 7, 8, 11, 12, 15, 16, 19 and 20 are open-ended questions. Questions 5, 6, 9, 10, 13, 14, 17, 18, 21 and 22 are closed-ended questions. Open-ended and closed-ended questions were used to ensure that the interviewee had the possibility to reflect on the open-ended questions and to possibly make additions with the closed-ended questions. With the closed-ended questions, the researcher always also asked: why?

Table 47: Interview Guide for Salespeople

Interview guide for salespeople on the topic:
The Role of the Human Reward System in the Development of Salesperson-Customer Relationships: An Exploration of Companies in Complex Industrial Markets in Central Europe

Interview number: _____ **Date:** _____	
Interviewee: _____ **Company name:** _____	
Industry: _____	
Sample characteristics:	
* Age _____ * Gender _____	
* Education _____	
* Years of business experience _____ * Annual sales volume _____	
* Number of employees reporting to the senior executive salespeople _____	
* How much time do you generally spend on a single customer at an initial stage? _____	
Interviewer: Peter Kistler (PK)	

Question 1:	Please tell me a little bit about your business background; how long have you been working as a salesperson, sales manager, sales director, etc. and who reports to you?
Question 2:	How much time do you generally spend with a customer when you meet for the first time and what are the challenges that you face?
Question 3:	How do you reduce potential doubts which are present on both sides in the first phase of customer contact?
Question 4:	How do you generate future prospects, which correspond to the positive experience of the customer?

Question 5:	Do you always, often, sometimes, rarely or never provide all the information the customer wants to know?
Question 6:	Do you always, often, sometimes, rarely or never refer to a positive customer experience?
Question 7:	How do you establish and develop a personal relationship with the customer?
Question 8:	How do you attempt to perceive the customer's emotional state in particular situations?
Question 9:	Do you always, often, sometimes, rarely or never seek personal contact with the customer?
Question 10:	Do you always, often, sometimes, rarely or never attempt to perceive the customer's mental state?
Question 11:	How do you ensure that you treat the customer in a just and honest manner?
Question 12:	How do you ensure that the customer's expectations are met?
Question 13:	Do you always, often, sometimes, rarely or never ensure that the customer is treated in a just and honest manner?
Question 14:	Do you always, often, sometimes, rarely or never experience the customer openly sharing information?
Question 15:	How do you give the customer the freedom to decide on the content of a quote?
Question 16:	How do you use control behaviour so that the customer feels as though the decision is his alone?
Question 17:	Do you always, often, sometimes, rarely or never give your customer the freedom to decide with an offer and options?
Question 18:	Does the customer always, often, sometimes, rarely or never request the freedom to decide with an offer and options?
Question 19:	How do you explain the business position that you hold in your organisation?
Question 20:	How do you reduce the potential impact of your senior executive business position in front of the customer?
Question 21:	Do you always, often, sometimes, rarely or never disclose your business position in the initial phase of customer contact?
Question 22:	Do you always, often, sometimes, rarely or never try to acknowledge and value the customer in his position in the initial phase?

* Closing question: How did you find this interview?

* Obtain consent for participation in interview research:

I volunteer to participate in the PhD thesis conducted by Peter Kistler, University of Gloucestershire. I understand that the questions are designed to gather information about my experience in the sale of complex and customised products and services. I am one of approximately 20 – 25 participants being interviewed.

* Recommendation for further interview partners:

Source: Author

Appendix B: Interview Guide for Customers

The following interview guide was used for the four face-to-face interviews with the high-level customers (Table 48). The interview procedure is described in Section 5.7.2. Firstly, the participants were briefed on the focus and aim of the study. Secondly, the conversation was started with Questions 1 and 2, which were general and open respectively. Thirdly, the researcher made sure that the flow of the conversation was maintained by taking care not to interrupt the interviewee. Questions 3, 4, 7, 8, 11, 12, 15, 16, 19 and 20 are open-ended questions. Questions 5, 6, 9, 10, 13, 14, 17, 18, 21 and 22 are closed-ended questions. Open-ended and closed-ended questions were used to ensure that the interviewee had the possibility to reflect on the open-ended questions and to possibly make additions with the closed-ended questions. With the closed-ended questions, the researcher always also asked: why?

Table 48: Interview Guide for Customers

Interview guide for customers on the topic:	
The Role of the Human Reward System in the Development of Salesperson-Customer Relationships: An Exploration of Companies in Complex Industrial Markets in Central Europe	

Interview number: _____ **Date: _____**	
Interviewee: _____ **Company name: _____**	
Industry: _____	
Sample characteristics:	
* Age _____ * Gender _____	
* Education _____	
* Years of business experience _____ * Annual purchase volume _____	
* Number of employees reporting to the high-level customer _____	
* How much time do you generally spend on a single meeting with a salesperson in the initial stages? _____	
Interviewer: Peter Kistler (PK)	

Question 1:	Please tell me a little bit about your business background; how long have you been working as a buyer of industrial goods?
Question 2:	How much time do you generally spend with a salesperson when you meet for the first time, and what are the challenges you face?
Question 3:	How do salespeople reduce potential doubts which are present on both sides in the initial phase your contact with them?
Question 4:	How do salespeople generate future prospects, which correspond to your positive experience?

Question 5:	Are salespeople always, often, sometimes, rarely or never transparent with the information that they give you?
Question 6:	Do salespeople always, often, sometimes, rarely or never refer to a positive experience that you have had with a salesperson?
Question 7:	How do salespeople try to establish and develop a personal relationship with you?
Question 8:	How do salespeople attempt to perceive your emotional state in particular situations?
Question 9:	Do salespeople always, often, sometimes, rarely or never seek personal contact with you?
Question 10:	Do salespeople always, often, sometimes, rarely or never attempt to perceive your mental state?
Question 11:	How do salespeople ensure that you are treated in a just and honest manner?
Question 12:	How do salespeople ensure that your expectations are met?
Question 13:	Do salespeople always, often, sometimes, rarely or never ensure that you are treated in a just and honest manner?
Question 14:	Do salespeople always, often, sometimes, rarely or never share information?
Question 15:	How do salespeople give you the freedom to decide on the content of a quote?
Question 16:	How do salespeople use control behaviour so that you feel as though the decision is yours alone?
Question 17:	Do salespeople always, often, sometimes, rarely or never give you the freedom to decide with an offer and options?
Question 18:	Do salespeople always, often, sometimes, rarely or never request you to decide with an offer and options?
Question 19:	How do salespeople explain the business position that they hold in their organisation?
Question 20:	How do salespeople reduce the impact of their business position with the customer?
Question 21:	Do salespeople always, often, sometimes, rarely or never disclose their business position in an initial phase of a contact?
Question 22:	Do salespeople always, often, sometimes, rarely or never try to acknowledge and value you in your position in the initial phase?

* Closing question: How did you find this interview?

* Obtain consent for participation in interview research:

* Recommendation for further interview partners:

Source: Author

Appendix C: Structured Participant Observation Protocol

The following structured participant observation protocol was used for the three observed initial meetings between a senior salesperson and a senior customer (Table 49). As described in detail in Section 5.7.3, the researcher was present in the role of sales consultant. He observed how certainty is created in a relatively uncertain initial phase of a business relationship between a seller and a buyer company. There were two main criteria used to assess the observations: firstly, to track whether and how the three concepts of the social domain of certainty were adhered to by the salesperson and secondly, whether these concepts were carried out, to observe the order in which the three concepts occurred during the salesperson-customer interaction.

Table 49: Structured Participant Observation Protocol

Structured participant observation protocol on the topic:
The Role of the Human Reward System in the Development of Salesperson-Customer Relationships: An Exploration of Companies in Complex Industrial Markets in Central Europe

Demographic information:

Meeting number: _____   Date: _____

Salesperson: _____   Company name: _____

Industry: _____

Customer: _____   Company name: _____

Industry: _____

Observation site: _____

Length of meeting: _____

Other participants: _____

Facilitator: second supervisor (HV); Observer: Peter Kistler (PK)

Category/phase	Welcome/final phases	Conceptional phases
Phase 1: Welcome: (a) wait-and-see or expectant attitude, (b) eye contact, handshake, accidental contact.		
Phase 2: Clarifying the customer's expectations: (1) reference projects, (2) application notes, (3) quality standards, (4) confidentiality agreements, (5) utility		

models and items on loan.												
Phase 3: Establishing a positive relationship on a common basis: (6) technological knowledge, (7) background information, (8) understand personal situation.												
Phase 4: Demonstrating technical and social competence: (9) understand applications, (10) understand technical problems, (11) understand personal needs and preferences.												
Phase 5: Final stage: (c) summary and conclusion with flipchart, laptop, verbal, (d) good-bye with handover of customer giveaways, invitation for lunch or an event.												

Descriptive and reflective notes	
Descriptive notes:	**Reflective notes:**

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* At the end of the meeting, the participants were briefed on the focus and aim of the study.

* Obtain consent from salesperson and customer:

  I volunteer to participate in the PhD thesis conducted by Peter Kistler, University of Gloucestershire. I understand that the observation data is about my experience in the sale/purchase of complex and customised products and services. This meeting is one of approximately 3 – 5 salesperson-customer observations.

Source: Author

Appendix D: Results from the Structured Participant Observation

The following Table 50 shows more details and the categorisation of the early stage of the three structured participant observations.

Phases	Statements about the observations	Findings from the observations	Interpretation of the findings
Phase 1: Welcome: (a) wait-and-see or expectant attitude, (b) eye contact, handshake, accidental contact.	(a) In dyadic relationship 1 and 3, the salespeople showed a wait-and-see attitude, whereas in dyadic relationship 2, the salesperson showed an expectant attitude by starting to talk directly to the customer about his technical knowledge, and did not listen to the customer's needs. (b) In all of the meetings, the salesperson and the customer shook hands at the beginning and they had eye contact. There was no accidental contact. Interestingly, the salespeople and the customers sat opposite each other.	In all of the meetings, the salesperson asked the customer about his general well-being at the beginning of the meeting which seems to be important for the further course of the interpersonal relationship. In all of the meetings, the salesperson and the customer tried to work out where they may have met; for example, during their post-graduate diploma study, military service or through third parties.	The expectant attitude from the salesperson in dyadic relationship 2 made the communication with the customer more difficult as the customer was not able to disclose his expectations and therefore, did not show openness at the beginning of the meeting. The wait-and-see attitude of the salespeople in dyadic relationship 1 and 3 helped to make the customer more open to share information with the salesperson. Salespeople and customers always try to find out where they may have met in the past. This is a means to assess each other's relevant social status (Section 4.2.5).
Phase 2: Clarifying the customer's expectations: (1) reference projects, (2) application notes, (3) quality standards, (4) confidentiality agreements, (5) utility models and items on loan.	Salesperson 1 started his meeting with clarifying the customer's expectations by firstly listening to the customer and asking interposed questions. He then presented (1) reference projects, (2) application notes, and (3) quality standards on his iPad. With Salesperson 2, this phase started only after he had disclosed his technical and social competences. He then presented (1) reference projects, and (3) quality standards via laptop and	By listening to the customer and asking interposed questions, Salesperson 1 tried to figure out the customer's interests and preferences and build the further conversation on these insights. By talking directly about his technical skills, Salesperson 2 did not know the customer's expectations. Only after finishing his presentation, did he ask the customer about his expectations. Salesperson 3 focused	By starting the meeting by clarifying the customer's expectations, for Salespeople 1 and 3, it is clear at the beginning of the meeting what the customer expected from them. They were therefore able to immediately estimate which expectations could be met and which expectations could not.

	PowerPoint. At the end, he asked the customer about his expectations. Salesperson 3 started his meeting by clarifying the customer's expectations and asking him about his special requests. He spoke about (1) reference projects, (4) confidentiality agreements, and (5) utility models and items on loan. Thereby, he used different brochures.	entirely on the customer's expectations and thereby used different sets of brochures during the meeting.	
Phase 3: Establishing a positive relationship on a common basis: (6) technological knowledge, (7) background information, (8) understand personal situation.	After clarifying the customer's expectations, Salesperson 1 proceeded to establish a positive relationship on a common basis. He asked him specific questions about his (6) technological knowledge. After demonstrating technical and social competence and clarifying the customer's expectations, Salesperson 2 started by establishing a positive relationship on a common basis. He asked about (7) background information and about his (8) personal situation. After clarifying the customer's expectations and demonstrating technical and social competence, Salesperson 3 started by establishing a positive relationship on a common basis. He asked about the customer's (6) technical knowledge and about (7) background information on the customer.	Since Salesperson 1 knew what they customer expected, he could focus his conversation on establishing a positive relationship on a common basis. Since Salesperson 2 did not know the customer expectations, he could not focus his conversation towards establishing a positive relationship on a common basis because he didn't know the customer's personal situation. Since Salesperson 3 knew the customer's expectations, he could also focus his further conversation on establishing a positive relationship.	By knowing the customer's expectations, it is easier for a salesperson to establish a positive relationship on a common basis. If the customer's expectations are not known, the salesperson will have difficulty establishing a positive relationship on a common basis. Some background information will remain hidden and the customer's personal situation unclear even if the salesperson asks for them.
Phase 4: Demonstrating technical and social competence:			

(9) understand applications, (10) understand technical problems, (11) understand personal needs and preferences.	After clarifying the customer's expectations and after establishing a positive relationship on a common basis, Salesperson 1 proceeded to demonstrate his technical and social competence. He specifically tried to (9) understand the customer's application, his (10) technical problems and his (11) personal needs and preferences. Salesperson 2 started his communication with the customer by demonstrating technical and social competence. At the beginning, he immediately tried to (9) understand the customer's applications and his (10) technical problems. After clarifying the customer's expectations, Salesperson 3 demonstrated his technical and social competence. He tried to (9) understand the customer's applications, his (10) technical problems and his (11) personal needs and preferences.	Salesperson 1 tried to understand the customer's applications by using the questioning technique. In this way, he was able to work out the customer's technical problems. Closely linked to the technical problems are the customer's personal needs and preferences. Salesperson 2 tried to understand the customer's applications while he was giving his technical presentation. He often referred to his own applications. Salesperson 3 tried to find out verbally what kind of applications the customer was interested in. At the same time, he tried to find out where the customer had technical problems. At the end, it was not clear what needs and problems the customer had.	By knowing the customer's expectations, and by having established a positive relationship on a common basis for the salesperson to demonstrate technical and social competence. Over the further course of an interpersonal relationship, it is essential to understand the customer's personal needs and preferences.
Phase 5: Final stage: (c) Summary and conclusion with flipchart, laptop, verbal, (d) good-bye with handover of customer giveaways, invitation for lunch or an event.	(c) Salesperson 1 summarised the meeting with a flipchart and he also developed further ideas and actions. Salesperson 2 finalised the discussion with a final summary slide, whereas Salesperson 3 concluded his presentation verbally and without any technical aids. (d) In all of the meetings, no customer giveaways	While Salesperson 1 used a flipchart for the summary and conclusion, many other customer problems came to the fore during this final phase. These additional problems offered the salesperson an opportunity to suggest improvements. The summary was interactive and not stereotypical as the summary of Salesperson 2 with the laptop and the final slide.	The final stage is most effective if it is arranged interactively. This is because it encourages the customer to reflect effectively on his situation and problems. New or unknown problems will appear. If these further problems are discussed, this offers the potential to define further actions.

	were handed over. However, in all of the meetings, the salesperson and the customer went out for lunch together and the salesperson paid the bill. The introduction, the technical discussions and the summary and conclusion lasted 2h 10 min. (dyadic relationship 1), 1h 55 min. (dyadic relationship 2) and 1h 45 min. (dyadic relationship 3).	While Salesperson 3 summarised everything verbally, not a lot was concluded.	

Source: Author

Appendix E: Companies Participating in this Study

The following data collection includes the 22 companies at which the salespeople and the customers were employed when the data collection took place between May 2013 and June 2014. The presentation of the data is subdivided into products and services these companies offer and in which business environment they operate. There are certain predominate characteristics in this environment which have implications for salespeople and their selling behaviour. The salespeople's companies are labelled 'Sx' and the customers' companies with 'Cx':

Company S1 has been conducting research for more than five decades in the top field of analytics and been developing technologically advanced solutions for a broad range of applications. With its advanced preclinical imaging solutions, *Company S1* is one of the world's leading companies for measurement and analysis technology. Outstanding technological applications plus comprehensive customer service are the basis for its success.

Company S2 is the technology leader for innovative solutions in automation and industrial education. For more than 90 years, it has been developing, manufacturing and selling pneumatic and electrical control and drive technology from single products to turnkey solutions. *Company 2* is the world leader in automation technology and world market leader in technical education and training.

Company S3 is a global technology supplier of medical laser equipment, and offers services and solutions in the field of automation and mechatronics systems. *Company 3* was founded over 25 years ago and occupies top positions in its main target markets by implementing consistent niche strategies and offering a very high level of service.

Company S4 provides a variety of innovative turnkey mass spectrometry systems for the academic, pharmaceutical, industrial, clinical and applied markets. Consistently and expertly supported, *Company S4's* turnkey system solutions and complete workflows offer integrated instrument and software tools which enhance the productivity and capabilities of any analytical operation. This is supported with extensive consulting and service benefits.

Company S5 is a leading provider of innovative measurement technology, sensor technology for critical processes and advanced process control software to improve the productivity and quality of sophisticated vacuum processes in highly specialised industries. *Company S5* has existed in this form for more than 15 years and has world-leading manufacturing facilities and other services.

Company S6 takes a leading role as a general contractor and system integrator. The core competencies of *Company S6* are the development and integration of complex technologies, systems and services for tactical systems in the areas of communication, leadership, education and simulation. Their services include technical support, as well as maintenance and repair work during the use of the systems.

Company S7 is the leading global provider of integrated solutions for energy management which can be adapted to the needs of every utility company. *Company S7* develops and sells technologies, systems and solutions that help energy providers and consumers to increase energy efficiency, reduce energy costs and promote the sustainable use of resources.

Company S8 is the world leader in the field of magnetic resonance and develops, manufactures and sells cutting-edge technologies and innovative solutions for the areas of biotechnology and genetic research. *Company S8* offers a new approach to maintenance and service for the modern laboratory and its system over the whole life cycle.

Company S9 is an international operating technology and service provider. It supports customers in IT strategy and concept development, custom software and product development, and in the implementation of projects. *Company S9* takes over all or a selection of services and responsibilities for an efficient and cost-conscious IT system and software operation.

Company S10 is an international project execution company and specialises in solutions and services in strategic markets and various industries such as the machine industry, medical devices, healthcare & diagnostics, and the chemical industry. The value added of *Company S10* is to offer its expertise as a subcontractor for other companies' projects, which results in efficient and professional solutions so that projects can be carried out in a cost-effective and economical manner.

Company S11 is a locally-based company, is a pioneer in the design, manufacture and construction of machines and equipment for ecological systems, and realises parts or entire system structures. *Company S11* has existed for more than 60 years, continually investing in the latest equipment and processes, and it focuses on offering comprehensive services throughout the life cycle of the systems.

Company S12 offers consulting support and is planning and implementing holistic solutions in the field of energy engineering. *Company S12* strives to put innovative ideas for customers into practice. It creates concepts and solutions within energy topics for the industrial goods sector and construction industry markets. It endeavours to offer support services for long-lasting projects.

Company S13 is one of the leading international manufacturers of heating, industrial and refrigeration systems, and offers individual solutions with efficient systems and services for all applications and all energy sources. *Company S13* offers comprehensive services from planning and commissioning to service in the industrial goods sector and construction industry.

Company S14 designs, develops, produces and sells high-technological microsurgical instruments. These instruments are cutting-edge and they are used around the world by surgeons and hospitals. *Company S14* builds on innovation and long-lasting customer relationships.

Company S15 develops customised mechatronic systems with extensive expertise in the production and assembly of technologically advanced systems, modules and components. *Company S15* supports its customers with technical advice and assistance and helps them to select suitable components right from the development and prototype phase. It also supports them actively with product and cost optimisation.

Company S16 is a local provider of services and supports, trades and sells information in the field of high-technology products through the use of suitable media and systems. *Company S16* provides direct and targeted communication with its customers and focuses on building long-term relationships with them.

Company S17 is the world's leading supplier of physical vapour deposition coatings, which significantly improve the performance and durability of precision components as well as tools for metalworking and plastics' processing. *Company S17* takes over challenging duties and responsibilities on the customer's side and integrates systems in the production process on the customer's premises.

Company S18 is one of the leading local companies in the field of traffic monitoring, and provides proven solutions for speed and red-light monitoring in road traffic. *Company S18* supports its customers with innovative products and expert service. This involves meeting the local customer requirements and market needs in the best possible way.

Company C1 is a company which procures systems and solutions to process high-quality products in the fields of basic and quality steel, stainless steel, nonferrous metals and special materials. *Company C1's* business drivers are customer orientation and customer service to achieve long-term relationships with manufacturers and customers in different areas within high-technology products and services.

Company C2 deals with the development of sustainable projects and complex human-environment systems in the fields of environmental technology, solar technology and energy balance. *Company C2* procures high-quality systems and solutions and integrates them into existing high-technology environments or into newly developed high-technology systems with the aim of optimising its production processes.

Company C3 procures products and solutions to meet the essential requirements of the markets, such as resource conservation, energy conservation, and miniaturisation. Through its extensive experience with modern technologies, efficient processes are implemented and transferred to the customer. *Company C3* works closely with buyer and seller companies, and its innovation processes are based on close cooperation with the customer.

Company C4 is a market leader in technology and in methods for processing grain for flour and feeding the world. The core technologies of the company range from mechanical- to thermal process engineering. *Company C4* procures the latest systems and technologies, which operate for several decades and thereby need servicing by the seller company.

Appendix F: Salespeople Participating in this Study

Appendix F contains the following information on the 18 salespeople who participated in this study: person-specific characteristics such as age, education, experience in the field of selling complex and customised products and services, and personal selling style. The personal selling style of each of the salespeople is underpinned with an appropriate quote from each of them to provide insights into context sensitive factors. They all have a predominant selling style, but successful salespeople are capable of combining various selling styles depending on the sales situation (Häusel, 2015) to create value during salesperson-customer interactions (Alamäki & Kaski, 2015; Haas et al., 2012). In the following data compilation, the personal selling styles of the salespeople participating in this study are categorised as collaborative, knowledgeable, goal-oriented or sensitive (Section 3.4.1.1).

Customer 1's interview was held between Salesperson 9 and Salesperson 10's interviews. *Customer 2* and *Customer 3's interviews* were held between Salesperson 13 and Salesperson 14's interviews. *Customer 4's interview* was held between Salesperson 14 and Salesperson 15's interviews. This sequence is reflected in the following listing of salespeople and customers:

Salesperson 1 is between 50–60 years old. He is Vice President of Application and Sales, and has been involved in selling high-technology, pre-clinical imaging systems and solutions since 1986. *Salesperson 1* started as an application scientist and then moved into the position of Vice President of Application and Sales. He has been leading the sales department for 14 years now and is in charge of the Swiss, Scandinavian and Asia Pacific markets. In the introduction to the interview, the researcher expressly mentioned that answers needed to be provided with respect to customers in Central Europe. The interview took place in the interviewee's office in the Zurich area on 14/05/2013. It lasted 73 minutes and was the first

in the main phase. During the interview, it emerges that *Salesperson 1* has excellent theoretical knowledge and a lot of practical experience in his business environment. He discusses the applications with the customer in detail and has a collaborative approach to solving the latter's issues (knowledgeable):

> "I try to understand the planned applications to suggest an appropriate system configuration. I try to ensure that the final quote the customer gets fully meets his needs. In the process, it is important that we work out a solution to the problem together. To some extent, this is difficult because I am increasingly dealing with customers who only have a limited understanding of the technology. There are customers who only focus on solving their application-oriented problem and not on the configuration itself." (Salesperson 1)

Salesperson 2 is between 30–40 years old. He is an area sales manager and has been working in the industrial goods sales' department since 2005. In his current position, he sells control and industrial automation technology systems. *Salesperson 2* started his career as a systems engineer in the industrial automation field and changed to sales after completing further studies in business administration. He is in charge of the Swiss, German and Austrian markets. The interview took place in the interviewer's office near Zurich on 14/10/2013. It lasted 65 minutes. This interview was the second in the pilot phase. *Salesperson 2* focuses on his customers' needs and is generous with his time and expertise (collaborative):

> "By communicating openly and bringing emotion into the conversation, I then become aware of how open my discussion partner is to enter into a personal relationship. This has a lot to do with empathy. I try to put myself into the customer's shoes. Sometimes I talk about personal matters or listen to the customer doing so for ¾ of an hour-long meeting." (Salesperson 2)

Salesperson 3 is between 30–40 years old and has been selling industrial goods since 2000. He is currently in charge of the sale of lasers for medical technologies which are sold as original equipment manufacturer components and are used in automation and mechatronics systems. *Salesperson 3* is an electronic engineer with a Postgraduate Diploma in Business Administration. He is active in the Swiss, Southern German and Austrian markets. The interview took place in the interviewee's office near Vaduz on 08/11/2013. It lasted 47 minutes and was the third in the pilot phase. During the interview, the researcher discovered that *Salesperson 3* focuses on details and addresses problematic situations on the customer's side to meet the latter's expectations (knowledgeable):

> "[In order to meet the customer's technical expectations in the event of a problem], I need to empathise with [the customer] and I have to work out what he really wants. I also have to find out his goals. I also need to change my perspective to give him a solution-based offer. It is important that solutions are developed together, because if this is the case, at the end of the day, the customer will always have the feeling that it was his idea. He cannot implement the idea by himself, but I am able to help him." (Salesperson 3)

Salesperson 4 is between 40–50 years old and has been working as a sales manager since 1998. He is currently in charge of the sales department and distributes high-technology mass spectrometry systems with his sales team for academic, pharmaceutical, industrial, clinical and applied markets in Switzerland, Germany, Austria and Benelux. *Salesperson 4* is a chemical laboratory worker and completed further studies as a sales manager and a sales coordinator. The interview took place in the interviewee's office near Zurich on 18/11/2013. It lasted 41 minutes and was the first in the main phase. During the interview, it emerged that *Salesperson 4* is detail-oriented and addresses business-related matters quickly when dealing with his customers (knowledgeable):

> *"I always try to create a pleasant atmosphere. A pleasant atmosphere can be created by taking the customer seriously, listening to him and responding to his needs. However, I always start a conversation with business-related matters. I then realise how open the customer is to talking about private matters. Sometimes I tell him something private about me and then observe his reaction." (Salesperson 4)*

Salesperson 5 is between 50–60 years old. He is the CEO and a sales director, and has been in charge of sales-related matters since 1989. He is wholly responsible for the sales of sensor technology systems and advanced process control software to improve productivity, along with the quality of sophisticated vacuum processes in highly specialised industries. *Salesperson 5* is a mechanical engineer with an additional qualification in business administration. He is responsible for the European, Indian, Middle Eastern, African, Asia Pacific and North and South American markets. In the introduction to the interview, the researcher expressly pointed out that answers needed to be provided with respect to customers in Central Europe. The interview took place in the interviewee's office near Vaduz on 16/12/2013. It lasted 72 minutes and was the second in the main phase. *Salesperson 5* sets himself clear targets, but always looks to generate added value for his customers and address their needs (collaborative):

> *"I know a lot about my customers' and contacts' private lives. Over the years, I have learnt that relationships can be built most easily on personal and private matters. I have had very positive experiences with my customers in this regard. It is important to minimise the distance between each other. However, you always have to go back to the facts, because you want to sell something at the end of the day. The intention is always to meet in the middle and develop a workable solution together." (Salesperson 5)*

Salesperson 6 is between 30–40 years old. He is currently a sales manager and sells complex technologies, systems and services for tactical systems in the areas of communications, leadership, education and simulation. He has been working in the sales area since 2006 and covers the Swiss and French markets. *Salesperson 6* is an industrial engineer and works in projects right from the initial stage through to the design, implementation and the acceptance of the system in the Department of Defense and Homeland Security. The interview took place in the interviewee's office in the Zurich area on 10/01/2014. It lasted 70 minutes and was the third in the main phase. *Salesperson 6* is very self-confident and sure of

his knowledge in the field, but is always interested in coming to a consensus with the customer. He understands his customers' business very well and can generate customer value (goal-oriented):

> "Some customers are resistant to innovation. But to introduce innovations, I have to go forward together with the customer. I often wait for the chance to meet the customer in a relaxed environment again. In the industrial goods sector and especially with our products, there are always conferences where potential customers can be found. This is my chance and I try to meet the customer in a relaxed environment again." (Salesperson 6)

Salesperson 7 is 60+ years old. He is a sales manager and has been selling complex and customised products and systems since 1989. In his current position, he is selling integrated solutions for energy management and power supply applications. *Salesperson 7* began his career as a tool maker and undertook further studies as a sales engineer and a sales manager before he took over the responsibilities of his current position. His market is Switzerland. The interview took place in the interviewee's office in Zug on 12/05/2014. It lasted 46 minutes and was the fourth in the main phase. The researcher discovered that *Salesperson 7* focuses entirely on his customers. He puts his own interests completely to one side to solve the customer's problems (sensitive):

> "In our business sector, we aim to realise [a project] together. The primary goal is to find out the customer's interests, to understand his situation and to find a solution to his problem. This creates more confidence than when I show off my results and successes." (Salesperson 7)

Salesperson 8 is 60+ years old. He is an application- and sales manager and has been involved in customer support and sales activities since 1976. He advises his customers and sells nuclear magnetic resonance spectroscopy systems with his team in the academic, pharmaceutical and industrial fields. He is responsible for the Swiss, Indian and Australian markets. *Salesperson 8* is an electrical engineer with an additional qualification in business administration. In the introduction to the interview, the researcher expressly pointed out that answers needed to be provided with respect to customers in Central Europe. The interview took place in the interviewee's office in the Zurich area on 15/01/2014. It lasted 71 minutes and was the fifth in the main phase. During the course of the interview, the researcher concluded that *Salesperson 8* is a relationship builder and always tries to uncover and focus on the customer's interests (collaborative):

> "[In front of the customer], I have always tried to act in such a way that the customer has the feeling that he already knows a lot [about the technology I am selling]. This behaviour has always evoked a certain mutual sympathy… I have also always tried to find out where the customer's interests lie. In this way, I discover common ground and let the customer speak. As a result, we build a close relationship." (Salesperson 8)

Salesperson 9 is between 50–60 years old. He is the Director of Sales and the CEO, and has been involved in sales activities since 1991. He is fully responsible for the sales of implementations and system operational technologies and IT services, and digital publishing. *Salesperson 9* is an electrical engineer and holds an additional qualification in business administration. His markets are Switzerland, Liechtenstein, Southern Germany and West Austria. The interview took place during a customer event in the St. Gallen area on 08/05/2014. It lasted 57 minutes and was the sixth in the main phase. During the interview, the researcher discovered that *Salesperson 9* is highly customer oriented. His main goal is to meet his customers' expectations without being intrusive (collaborative):

> *"I always ask about the customer's dreams. In this way, I get an idea of his needs and desires. We solve the customer's needs and don't just go out with products and sell them. I ensure this by listening and enquiring. I always ask the customer whether we have fulfilled his expectations. As the Director of Sales, this is something I can do quite well, and I know that I will receive an honest answer." (Salesperson 9)*

Customer interview 1: The first customer interview took place in the St. Gallen area on 08/5/2014 between the face-to-face interviews with Salesperson 9 and Salesperson 10, and lasted 53 minutes. *Customer 1* is the Head of Procurement in a company which develops, manufacture and sell systems and solutions to process high-quality products in the fields of basic and quality steel, stainless steel, nonferrous metals and special materials.

Salesperson 10 is between 30–40 years old. He is the CEO and sales director and has been in charge of sales since 2007. He has financial responsibility for the entire company, which includes project execution services in various industries such as the machine industry, medical devices, healthcare & diagnostics, and the chemical industry. *Salesperson 10* is a mechanical engineer. He is in charge of the Swiss, German, Austrian and Middle Eastern markets. In the introduction to the interview, the researcher expressly pointed out that answers needed to be provided with respect to customers in Central Europe. The interview took place in the Zug area on 12/05/2014. It lasted 60 minutes and was the seventh in the course of the main phase. For *Salesperson 10*, his relationship with his customers is important. He focuses on his customers' needs, even if it places him at a disadvantage (collaborative):

> *"I'd rather lose money than the trust that I have built up with the customer. A certain solution may give me a strategic advantage, but result in the customer being disadvantaged in the process. This would make me feel guilty." (Salesperson 10)*

Salesperson 11 is between 40–50 years old. He is the CEO and is responsible for the sales activities in a company which develops, manufactures and distributes machinery and equipment for ecological systems. He has been engaged in sales acquisition and sales management since 1995. *Salesperson 11* attended a school for technicians and holds a Certificate of Education in Business Administration. He sells his systems and products in Switzerland, Liechtenstein, Southern Germany and Western Austria. The interview took place at the end of a group meeting with people from a focus group in the interviewee's

office in the Feldkirch area on 16/05/2014, and lasted 46 minutes. The topic of the focus group discussion had nothing to do with the subject of the current study. This interview was the eighth in the course of the main phase. *Salesperson 11* mainly focuses on his customers' needs and basically behaves obligingly (collaborative):

> *"[When dealing with my customers] I am always very accommodating. I have a feeling that you need to be like this, especially if something is not working as it should. Then the situation is not so tense and more often a solution to a problem can be found together." (Salesperson 11)*

Salesperson 12 is between 40–50 years old. He is currently the CEO and is responsible for the revenue of the sales department in a company which produces machinery and equipment for ecological systems. Salesperson 12 has been working in sales and sales-related positions in the fields of energy and metal construction technologies since 1994. He is a mechanical engineer with an additional qualification in business administration. He is active in the markets of Switzerland, Liechtenstein, Southern Germany and West Austria. The interview took place at the end of a group meeting with people from a focus group in the interviewee's office in the Feldkirch area on 16/05/2014, and lasted 34 minutes. The topic of the focus group discussion had nothing to do with the subject of the current study. This interview was the ninth in the course of the main phase. During the interview, the researcher discovered that *Salesperson 12* is detail-oriented and addresses problematic situations on the customer's side fast (knowledgeable):

> *"I build a relationship with the customer mainly based on the facts of the project work itself. I try to be a partner to my customers and not to be too personal when talking about non-factual issues. When you solve problems together, this essentially creates a relationship." (Salesperson 12)*

Salesperson 13 is between 40–50 years old. In his current position, he is a sales claim and contract manager, and sells heating, industrial and refrigeration systems. He has been working in the sales field since 2004. *Salesperson 13* is a certified engineer with an additional qualification in business administration. He does business in the markets of Switzerland, Liechtenstein, Southern Germany and Western Austria. The interview took place at the end of a group meeting with people from a focus group in the interviewee's office in the Feldkirch area on 16/05/2014, and lasted 41 minutes. The topic of the focus group discussion had nothing to do with the subject of the current study. This interview was the tenth in the course of the main phase. During the interview, the researcher became aware that S*alesperson 13* is hard to control and follows his intuition when dealing with his customers (goal-oriented):

> *"The customer always has certain expectations which he would like to have met. If we reach a final agreement with respect to the customer's expectations, then I as a salesperson define the customer's expectations. The agreement must be respected as it has been settled." (Salesperson 13)*

Customer interviews 2 and 3: The second and the third customer interviews took place between the face-to-face interviews with Salesperson 13 and Salesperson 14; the second in the St. Gallen area on 16/5/2014 and the third in the Dornbirn area on 26.5.2014. *Customer 2* is a purchase director of complex human-environment systems in the fields of environmental technology, solar technology and energy balance, and he integrates them into existing high-technology environments or into newly developed high-technology systems with the aim of optimising production processes. The interview took place at the end of a group meeting with people from a focus group in *Salesperson 11's office,* and lasted 42 minutes. The topic of the focus group discussion had nothing to do with the subject of the current study. *Customer 3* is the Head of Procurement and Contracting in a company which procures products and solutions to meet the requirements of the markets, such as resource conservation, energy conservation, and miniaturisation. The interview lasted 43 minutes.

Salesperson 14 is between 40–50 years old. In his current position, he is the Director of Sales and Marketing, and is responsible for sales in a company which develops, manufactures and distributes ophthalmological and high-technology surgical equipment. He started his career in the sales department of a pharmaceutical company in 1994. *Salesperson 14* has a qualification in law and marketing, and an additional degree in business administration. He does business in the markets of Switzerland, Liechtenstein, Germany and Austria. The interview took place in the interviewee's office in the Dornbirn area on 26/5/2014. It lasted 62 minutes and was the eleventh in the course of the main phase. *Salesperson 14* is detail-oriented and addresses problematic situations on the customer's side fast (knowledgeable):

> *"I have to say that I've often gone to customers to discuss bad experiences. I have always seen my role as one of going to customers in unpleasant and difficult situations. The goal in such situations was always that I, as Sales Director, can discuss bad customer experiences directly. In cases of doubt, the salesperson needs to be loyal to the customer and not to the company where he is employed."*
> *(Salesperson 14)*

Customer interview 4: The fourth customer interview took place in the St. Gallen area on 30/5/2014 between the face-to-face interviews with Salesperson 14 and Salesperson 15. *Customer 4* is the Head of Procurement in a company which develops, manufactures and sells score technologies in the fields of mechanical and thermal process engineering. The interview lasted 92 minutes.

Salesperson 15 is 60+ years old. He is a sales director and has been involved in various sales activities in different companies since 1989. In his current position, he does the acquisition and processing of projects related to precision engineering and high-technological products and solutions. *Salesperson 15* began his career as an instrument mechanic before he was promoted to his present position. His markets are Switzerland and Liechtenstein. The interview took place in the interviewee's office in the Zurich area on 30/5/2014. It lasted 46 minutes and was the twelfth in the course of the main phase. During the interview, the researcher discovered that *Salesperson 15* is a hard worker who makes every effort to provide his customers with the best possible solution to a problem (sensitive):

> *"In order to fully meet the expectations of the customers, you have to torture yourself; otherwise, there is no chance of finding a viable solution." (Salesperson 15)*

Salesperson 16 is between 40–50 years old. He is currently the Director of Sales, and is in charge of the sales and service revenue and supports his customers through the use of suitable media systems in the range of high-technology products. He has been working in sales and sales-related fields since 1991. *Salesperson 16* studied mechanical engineering and also completed an additional qualification in business administration. He is solely responsible for the Swiss market. The interview took place in a restaurant near the interviewee's office in the Zurich area on 10/6/2014. It lasted 37 minutes and was the thirteenth in the course of the main phase. *Salesperson 16* has a tendency to be self-confident and follows his intuition when dealing with his customers (goal-oriented):

> *"[In a customer meeting], I introduce the topic and set the context of our conversation based on my objectives. I tell my customer what my expectations are and ask him to tell me his expectations." (Salesperson 16)*

Salesperson 17 is between 40–50 years old. He is the Head of Global Sales and Aftersales, and sells products and services in the fields of precision components, metalworking and plastics processing systems. He has been working in the sales field since 1996 and he has vast experience in direct sales, sales through distributors and after-sales service/support. *Salesperson 17* is a certified manager of customer sales and service, and holds a Postgraduate Diploma in Business Administration. He works in the markets of Europe, India, Middle East, Africa, Asia Pacific and the Americas. In the introduction to the interview, the researcher expressly pointed out that answers needed to be provided with respect to customers in Central Europe. The interview took place in a restaurant near the interviewee's office in the Vaduz area on 11/06/2014. It lasted 52 minutes and was the fourteenth in the main phase. *Salesperson 17* likes to debate, but he fully understands his customers' business (goal-oriented):

> *"Promises must be respected; otherwise, the salesperson has to contact the customer immediately. It is actually the direct communication with the customer that is important... I have discovered that business can always be discussed in-depth and you can have different opinions. However, it is important that [the salesperson and the customer] go out for dinner together after the discussion and spend some time talking about non-business-related matters." (Salesperson 17)*

Salesperson 18 is between 40–50 years old. He is the Director of Sales and has been selling industrial goods since 1998. He is currently in charge of the sale of radar- and high-technological measurement systems. *Salesperson 18* has a degree in sales, including a Postgraduate Diploma in Business Administration. He is in charge of the sales markets of Switzerland and Southern Germany. The interview took place in a restaurant near the interviewee's office in the Zurich area on 18/6/2014. It lasted 58 minutes and was the last in the course of the main phase. *Salesperson 16* focuses on his customers' needs and provides his customers with extensive aftersales perks and personal attention (collaborative):

"Goodwill is very important. If I am picky, the customer will also be picky about the terms and conditions in a quote. I am generous and expect the same from the customer. A service is often not in the customer's budget, and I do not ask for payment then. This is purely friendship. It is always mutual. The customer helps me and I help him, which also leads to shared experiences." (Salesperson 18)

Appendix G: NACE Rev. 2 Codes for Industries

An excerpt from high-technology and medium high-technology industries is illustrated in Table 51:

Table 51: NACE Rev. 2 Codes for Industries

Manufacturing industries	NACE code	High-technology manufacturing industries
High-technology	21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
	26	Manufacture of computer, electronic and optical products
	30.3	Manufacture of air and spacecraft and related machinery
Medium high-technology	20	Manufacture of chemicals and chemical products
	25.4	Manufacture of weapons and ammunition
	27	Manufacture of electrical equipment
	28	Manufacture of machinery and equipment n.e.c.
	29	Manufacture of motor vehicles, trailers and semi-trailers
	30	Manufacture of other transport equipment **excluding** 30.1 Building of ships and boats, and **excluding** 30.3 Manufacture of air and spacecraft and related machinery
	32.5	Manufacture of medical and dental instruments and supplies

Source: Eurostat

Appendix H: NACE Rev. 2 Codes for Services

An excerpt from high-technology knowledge-intensive services is provided in Table 52:

Table 52: NACE Rev. 2 Codes for Services

Services	NACE code	High-technology services
High-technology knowledge-intensive services	59	Motion picture, video and television programme production, sound recording and music publishing activities
	60	Programming and broadcasting activities
	61	Telecommunications
	62	Computer programming, consultancy and related activities
	63	Information service activities
	72	Scientific research and development

Source: Eurostat