



This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document and is licensed under Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0 license:

Vrontis, Demetris, Thrassou, Alkis and Amirkhanpour, Monaliz (2017) B2C smart retailing: A consumer-focused value-based analysis of interactions and synergies. Technological Forecasting & Social Change, 124. pp. 271-282. doi:10.1016/j.techfore.2016.10.064

Official URL: <http://doi.org/10.1016/j.techfore.2016.10.064>

DOI: <http://dx.doi.org/10.1016/j.techfore.2016.10.064>

EPrint URI: <https://eprints.glos.ac.uk/id/eprint/4165>

Disclaimer

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

1. Introduction

1.1. Research Context, Aims and Value

Smart, technology-based interactions and synergies between businesses and consumers have already precipitated as a corner stone of the 21st century economic context. Though relatively young in age, digital technologies' sheer gravity has forced an astonishingly extensive volume of research to be dedicated to it, in a – de facto – futile attempt to keep up with its aggressive nature.

For many years, marketers and advertisers have created communication strategies based on print, radio, TV, and mainstream internet media to broadcast their marketing messages. With rapid developments in technology, the effectiveness of these traditional media has significantly decreased and newer digital channels such as e-mail, social media and mobile have emerged. Digital marketing communication techniques, especially mobile marketing - on which this paper focuses - revolutionized marketing towards primary communication goals (such as attention and trust from customers), as well as towards wider strategic marketing challenges (such as developing lasting inimitable competitive advantages). The popularity of personal mobile devices, such as smartphones and tablets has, in fact, introduced a new form of marketing to businesses that can target a large number of people, anywhere in the world, while also furnishing businesses with relevant information about the needs, preferences and profiles of their customers; all in a timely and profitable manner. However, some research studies (see subsequent literature review) suggest that mobile marketing does not succeed as an isolated channel: it works best when integrated with other channels, such as social media, to form a cross-platform strategy or, in other words, to adopt a multi-channel marketing approach.

And while existing literature on the subject has largely adopted a more functionalistic interpretation of the subject, focusing on the explicit and more visible/tangible implications and benefits of smart technologies in the business-consumer (B2C) relationship, other scholars (e.g. [Shankar et al., 2016](#); and [Shankar, 2016](#)) have also adopted a more holistic approach (see subsequent literature review). This research, in the context of the latter, transcends the functional and oligo-dimensional approach of many conventional works, to provide a multi-perspective analysis of the *values* involved in the retailing B2C relationship; not as a simple interaction, but as a comprehensive system. Specifically, based on the conceptual development of theoretical considerations in existing literature, *the research aims* to develop a value-based multi-dimensional framework for B2C smart retailing. Towards this aim, *four distinct objectives* have been set:

1. to undertake an extensive theoretical research on existing literature on the subject and its peripheral and contextual factors;
2. to identify the value categories and individual elements, which explicitly or implicitly define the retailing B2C relationships and synergies;
3. to *descriptively* delineate their inter- and intra-relationships;
4. to *prescriptively* incorporate all into a single, provisional, value-based multi-dimensional framework for B2C smart retailing.

The *value and contribution of the research* is multifold. Firstly, it is a value-based analysis that provides an insight to the B2C relationship, including underlying motivators and implicit factors, which are unseen or underestimated by the more functionalistic works. Secondly, the research constructs a comprehensive framework that incorporates all significant categories and individual values to both sides. Thirdly, the above is constructed within the wider context of the rising consumer behavior, allowing also predictive conclusions to be drawn. Finally, the research reaches also findings pertaining to practitioners and of direct industry worth and applicability. The importance of the above, that constitutes the research's unique contribution to knowledge, pertains to the *perspective* of the process and findings that utilizes 'value' as a single 'common currency' to understanding the underlying motivators of both sides of the business-consumer relationship. Moreover, while most past research accepts the dynamic nature of the smart retailing element of the relationship, this research also perceives the consumer side as an independently dynamic (fast changing) element, reaching descriptive and prescriptive conclusions that balance the two elements within a strongly interactive

synergy and an inevitable equilibrium of power and mutual respect, as the only practicable means of preserving a mutually beneficial relationship.

1.2. Methodology

Methodologically the research is, inescapably, a *conceptual* one. This is partly owing to its pioneering perspective on the subject, and partly consequent to the large number of factors and forces involved; which, at this comprehensive outlook stage, must be collectively considered, but cannot be collectively empirically tested. The above is further derived from the contrast of the abundance of generic and background data versus the lack of directly specific data. Considering, thus, the aims and objectives of the research, its contextual and practical constrictions, as well as the strong human element within the system, a combination of philosophies have been applied.

Namely, *positivism* and *interpretivism*, and rather naturally from there, a mixed *inductive-deductive approach*; with interpretivism and the inductive approach bearing the greatest weight (Saunders et al., 2015). To enhance the scientific nature of the research methodology, the research processes, the framework and the conclusions are being progressively developed following the stage-by-stage undertaking of scholar and practicing experts' interviews.

The *theoretical foundation* of the work rests on an extensive *narrative literature review*. This method was applied due to its suitability in critiquing and summarizing a relevant body of literature, in drawing conclusions about the topic, and in identifying gaps (Fink, 2010 and Urquhart, 2011). It required significant in quality and volume research, as well as a sufficiently focused perspective; though, for practical purposes, this paper presents only the most relevant and substantive findings of the review. The theoretical part of the research, especially the more abstract aspects of it (linking marketing, strategy and consumer behaviour, to some degree) also rests on a *meta-synthesis literature review*. This method was partially applied due to its suitability in integrating, evaluating and interpreting findings of multiple qualitative research studies; in identifying common core elements and themes; and in involving, analysing and synthesizing key elements into a unified system (Fink, 2010 and Urquhart, 2011). It is also based on significant in quality and volume research, but largely rests on a smaller number of relevant past researches' conceptual models identified to have a sufficiently focused and relevant perspective.

The conceptual and implicative developments of the paper have relied on the *combination of the theoretical with the primary findings of the research*; and have been *designed and tested through fifteen experts' interviews/reviews*. Five of these experts (three industry, two scholarly) took place simultaneously, prior to the conceptual development, and contributed in the prioritization and isolation of the critical factors, as well as their preliminary interrelation. The other ten (four industry, six scholarly) acted as post-developmental 'gate-keepers' by independently reviewing and refining the theoretical foundation and process, and conceptual framework.

2. Theoretical foundation and analysis – A narrative literature review

2.1. The evolution of digital marketing

2.1.1. The changing marketing communications' mix

The new century has seen a significantly changing B2C relationship consequent to the development of various digital technologies. This relationship however did not simply change in terms of the way, place and time that business takes place, but has essentially altered the very nature of the relationship and the wider consumer behavior context. More specifically, the world has witnessed a shift from the traditional product-dominant view to a service-dominant logic, of an increasingly intangible value (Vargo and Lusch, 2004, Vrontis and Thrassou, 2007a, Maglio and Spohrer, 2013 and Pantano and Timmermans, 2014). Correspondingly, marketing practices, albeit somewhat reflexively and erratically, have adapted to the change, with digital technologies and technology-based social behavior acting as both cause and effect (Oh and Teo, 2010, Amirkhanpour et al., 2014, Blazquez, 2014, Demirkan and Spohrer, 2014, Pantano, 2014, Rese et al., 2014 and Demirkan, 2015). The B2C relationship has changed functionally, but also essentially and contextually; with both the business and social frameworks of the relationship altered. The very concept of B2C interaction therefore has been redefined in terms of motivators and values, with consumers' role becoming more active and participative and the B2C relationship becoming increasingly 'symbiotic' (Zwass, 2010, Thrassou et al., 2012, Ngo and O'Cass, 2013 and Pantano and Timmermans, 2014).

Consequently, the traditional integrated marketing communications (IMC) mix required significant adaptation to emerging trends and new technologies, as well as to consumers' parallel changing

behavioral patterns and underlying motivators (Thrassou and Vrontis, 2009, Csikosova et al., 2014 and Oancea and Mihaela, 2015). Direct marketing and word-of-mouth (WOM) were found to be the primary IMC elements pertaining to digital marketing, particularly in the context of B2C smart retailing. Direct marketing is a basic form of marketing that occurs directly between marketers and customers without the presence of an intermediary (Kotler et al., 2009, Brassington and Pettitt, 2013 and Jobber and Ellis-Chadwick, 2016). The emergence of Internet and Communication Technologies (ICT) has reshaped the marketing paradigm, particularly of direct marketing, and into - what is known today as - online or digital marketing; which uses the internet to link existing and potential customers with sellers electronically (Turban et al., 2009, Gilbreath, 2010 and Ryan and Jones, 2012).

Direct marketing uses two categories of communication channels to address the target customers: (1) traditional channels such as direct selling, direct mail, telemarketing and telemedia, TV marketing, and (2) digital or online channels such as Search Engine Marketing (SEM), Digital Display Advertising (DDA), e-mail marketing, Social Media Marketing (SMM), and mobile marketing. Traditional marketing channels are characterized as broadcast, outbound, and one-way form of communication media, that are message-driven, didactic and overall constrained (Brassington and Pettitt, 2013, Chaffey and Ellis-Chadwick, 2015 and Jobber and Ellis-Chadwick, 2016). On the other hand, digital marketing channels are characterized as interactive two-way forms of communication media; and their activities are consumer and content-driven through personalization of content that is in tune with customer interests and expectations (Ryan and Jones, 2012, Gaskin, 2013, Taiminen and Karjaluo, 2015 and Kotler et al., 2016).

2.1.2. The post-modern digital consumer

With networked digital technologies such as email, instant messaging, and social networks consumers communicate and interact with people around the world without concerns like time zones or geographical boundaries. This form of peer-to-peer interaction reinforces the importance of incorporating digital technologies into marketing communication activities (*interconnectivity*). Digital technologies enable marketers to create and publish content quicker and easier than using traditional channels like print or TV. As a result, the scope of information available to consumers is broader and deeper than before. Consumers can research, access, compare and contrast products and services before they make a purchase. This implies that digital technologies shift the balance of power from the marketers to the consumers (*shift in balance of power*). Digital consumers learn to filter items relevant to them and ignore anything they recognize as irrelevant due to the overabundance of information available to them. They use personalization techniques to sift irrelevant content and block out unsolicited marketing messages. This strengthens the concept of permission-based marketing using digital channels. Permission-based marketing, or permission marketing is a type of marketing which seeks permission in advance from consumers before they are sent marketing communications where such communications may be distributed through emails, social media, and mobile devices (Kotler et al., 2009 and Kumar et al., 2014) (*relevance filtering*). Due to the abundance and variety of online content, the mass consumer population is fragmenting into smaller niche groups with increasing individual and targeted requirements. Digital consumers constantly look for content and information about their favorite brands, interests and hobbies that is organized, aggregated and personalized (*niche aggregation*). Like digital marketers, digital consumers can also publish their own content across several digital channels in order to express themselves online. This is particularly due to the interconnected and interactive nature of digital technologies that allow consumers to share their opinions online either through feedback forms, voting platforms, blogs, or social networks. Since the balance of power is shifted to the consumer, their opinions and reviews on specific products and services is vital for marketers to consider (*micropublishing*). Ritzer and Jurgenson (2010) and Szymusiak (2015) state that the term 'prosumer' means 'production by consumers' in which the role of producers and consumers is merging together mainly due to the high volume of user-generated online content. Labrecque et al. (2013), Quintana et al. (2015) and Stephen (2016) claim that prosumers have become a prominent factor for digital marketers as they create value for businesses by publishing and sharing their opinions and reviews at no cost (*rise of prosumers*). Finally, the ubiquitous digital technologies allow consumers to satisfy their needs and wants easily and with fewer barriers such as time, location, geography, and physical store space (*on-demand nature*).

Ryan and Jones (2012) identify seven key ways in which the widespread adoption of digital technologies influences consumer behavior and gives rise to the concept of the 'postmodern consumer':

1. Interconnectivity
2. Shift in balance of power
3. Relevance filtering
4. Niche aggregation
5. Micropublishing
6. Rise of prosumers
7. On-demand nature

The widespread adoption of digital technologies presents a plethora of new challenges for marketers to consider such as the concept of “postmodern consumer”. [Hirschman and Holbrook \(1992\)](#), [Holt \(1997\)](#), [Thompson \(2002\)](#), [Christensen et al. \(2005\)](#), and [Hamouda and Gharbi \(2013\)](#) indicate that postmodernism was a prominent social theory for nearly three decades, but marketers did not recognize it as an important descriptor of the current social trends. Postmodernism has an interdisciplinary nature which allows crossing theoretical limits and provides a richer vision of modern consumers, more specifically the digital consumers ([Brown, 2006](#) and [Hamouda and Gharbi, 2013](#)). Similarly, [Firat and Venkatesh \(1993\)](#), [Saren \(2011\)](#), and [Cova et al. \(2013\)](#) argue that with the introduction of postmodernism as an analytical framework of contemporary consumers, various consumption patterns and experiences can be noticed especially by digital consumers because they reveal who they are by searching for specific products or services, clicking on specific links or advertisements, registering for updates on products or services that interest them, and purchasing products or services that they need. An excellent and increasingly relevant example is mobile commerce. Mobile commerce (M-Commerce) allows marketers to connect directly with individual consumers via mobile devices (smartphones and tablets) in real time without any constraints ([Frolick and Chen, 2004](#) and [Simmons, 2008](#)). Indeed, the key to effective digital marketing using the mobile channel is the exploitation of the time-critical, location-based and personal nature of various mobile communication tools. However, a successful mobile marketing strategy is based on the need to integrate with the development of effective databases which consist of opt-in consumers. This enables marketers to transform mobile marketing content and utilize location-based technologies that take a consumer's location into account providing them with access to localized and personalized information ([Mort and Drennan, 2002](#) and [Singh, 2011](#)). Furthermore, [Dholakia et al. \(2004\)](#) and [Simmons \(2008\)](#) reveal that postmodern consumers adore being individual and continually reinventing themselves through their consumption experiences. They prefer an experience-based marketing communication that emphasizes interactivity, connectivity and creativity which is provided by digital marketing technologies. Various digital channels such as social networks, mobile apps, location-based services, etc. have forced marketers to consider the opportunities that are being created for their brands in the postmodern world ([Cova et al., 2013](#) and [Hamouda and Gharbi, 2013](#)). The next section elaborates on mobile marketing concept and how it can be integrated with social media marketing to form a multi-channel digital marketing strategy targeting postmodern consumers.

2.2. Mobile marketing and social media marketing integration

Mobile marketing emerged in the late 1990s with the sending of simple messages through Short Message Service (SMS), but the strategies have changed since the introduction of better technologies and the propagation of smartphones and tablets, where many other new mobile communication tools have emerged ([Okazaki, 2012](#)). The emergence of the mobile channel as a desired promotional conduit for many consumers has enabled the marketers to upgrade the level of permission-based marketing i.e. the practice of gaining consent from consumers in advance of a continuing marketing dialogue taking place on mobile devices and in return for some kind of value exchange ([Shukla, 2010](#), [Mobile Marketing Association \(MMA\), 2011](#) and [Hopkins and Turner, 2012](#)). As a result, the concept of ‘value exchange’ is a key aspect of effective and successful permission-based mobile marketing, since consumers give their consent, and sometimes personal demographic and preference information in exchange for a product, service, or offer that they deem of interest, of relevance, or of worth to them ([Armstrong et al., 2015](#) and [Martin, 2015](#)). Mobile marketing has rapidly become one of the most attractive marketing strategies for businesses, both small and large, as it is an innovative way to market a specific product or service to new and potential customers ([Krum,](#)

2010, Frangold, 2012 and Chaffey, 2016). Pasqua and Elkin (2013) and Martin (2015) state that being more connected has altered the ways consumers use their mobile devices, which, since 2012 support websites, apps, and other functionalities that lead to increased interactivity (Reisinger, 2012 and Klein, 2013).

The above underline the need for an appropriate strategic marketing framework to harmoniously incorporate value exchange between mobile network operators, the retailers and the customers. Mobile strategy is the framework that defines how various mobile tactics such as mobile websites, mobile apps and other mobile marketing communication tools are used to satisfy the customers' needs and achieve the specified marketing goals. Marketers are always searching for innovative, cost-effective, and highly influential methods in order to increase revenue and customer response rates by designing targeted marketing campaigns. Mobile marketing is the most appropriate medium to achieve these goals particularly because of the benefits that it offers to the businesses and marketers (Krum, 2010, Varnali et al., 2011 and Amirkhanpour and Vrontis, 2014). These benefits are affordability, distribution, immediacy, interactivity, marketing campaign integration, viral potentials, and the WOW factor. Moreover, due to the flexibility of mobile marketing, it is very easy to integrate new and innovative forms of promotional tools with existing ones in order to boost their effectiveness and interactivity. For example, mobile social media marketing is an innovative form of marketing that resulted from the integration of mobile with social media marketing. The viral potentials mainly relate to the fact that mobile marketing messages can be easily shared by the customers who have already received them from other people. This obviously increases the potential of reaching new customers at practically no cost. Finally, the WOW factor of mobile marketing is its newness and innovative structure that can give marketers as well as businesses the opportunity to become leaders in their sector and guarantee that marketing messages will reach the potential customers with higher impact (Al-Khalifa and Al-Khalifa, 2012, McCorkle et al., 2013 and Reiners et al., 2016).

Considering the turbulence and unpredictability of contemporary economic conditions, mobile marketing becomes a primary means to achieving marketing goals, particularly when it is integrated with other digital marketing communication channels such as social media to form a multi-channel marketing approach. Social Media Marketing (SMM) is the process of gaining traffic or attention through social media tools or applications particularly social networks. The networked structures of these social platforms in addition to the user-generated content enable massive communication and collaboration among social media users. Social networks are made up of nodes of individuals, groups, and enterprises which are connected to each other by types of interdependency or mutual connections (Segreto, 2010, Kerpen, 2011 and Brown, 2015). In simpler terms, a social network is a 'social' structure where users create their own web space and post photos/videos, exchange ideas, and link to other web locations (Evans, 2010 and Tranter, 2012). Various types of social networking sites exist on the Internet, but all of them have two common attributes: (1) they are not traffic drivers to other websites, and (2) they allow connected users or 'friends' to share, comment, tag, and discuss ideas with each other (Al-Suwaidi, 2013 and Rowles, 2014). Mobile social media can take various forms, but the primary forms are: mobile social networks, social gaming, content sharing and streaming, location-based check-in services, and content sharing via social sites (Berkowitz, 2010, Charlesworth, 2015 and Williams, 2016). Mobile social media is the intimate extension of the relationship that users have with their mobile devices and their ability to communicate with their favorite brands and businesses on-the-go. Al-Suwaidi (2013) and Williams (2016) believe that the social media revolution yielded two significant outcomes: (1) it has given consumers around the globe the most powerful voice they have ever had, and (2) it has forced companies and organizations to think about how they can be more transparent and responsive without spending huge amounts of money as compared with traditional media channels such as television, radio, and print (Kerpen, 2011, Sankaran, 2011, Rowles, 2014 and Guberti, 2015). Just as word-of-mouth marketing has always been viewed as the purest and the most transparent form of direct marketing, social media especially social networks have continued to prove this fact in several ways. Evans (2010) and Brown (2015) state that people like to share ideas and be connected to each other, their favorite brands and organizations. Typically, one of the most important elements of the social media revolution was the introduction of the 'Like' feature by the social networking giant Facebook in 2010, which has already been added by millions of distinct websites around the world (Kerpen, 2011 and Chaffey, 2016). This clearly implies that the content, companies, products, and ideas found being digitally 'likeable' by people results in building trust and popularity in their respective categories.

Reed (2011), Minsker (2014) and Laudon and Laudon (2015) argue that there is a lack of awareness and knowledge among marketers that plan to adopt and integrate mobile marketing into their digital marketing communications. This is due to the limited number of research studies exclusively dedicated to mobile marketing communications using smartphones and tablets. This argument is

further supported by [Dam \(2012\)](#) who states that mobile marketing is still in its infancy and many marketers do not know what opportunities are behind using smartphones and tablets for marketing communication purposes. In other words, lack of consumer and marketer education about mobile marketing is one of the main reasons why growth in this new digital marketing channel is relatively slower than its potential. There is a large gap between the rapidly increasing mobile search volumes and the majority of small businesses lagging behind in mobile search strategy ([Bellamkonda, 2012](#), [Magrath and McCormick, 2013](#) and [Chaffey, 2016](#)).

Furthermore, a number of scholars like [Otis \(2013\)](#), [Hanlon \(2015\)](#), [Jackson and Ahuja \(2016\)](#), [Jobber and Ellis-Chadwick \(2016\)](#) indicate that mobile marketing does not succeed as an isolated channel: it works best when integrated with other channels and tactics to form a cross-platform strategy. The term 'So-Lo-Mo' refers to a latest online marketing trend involving the integration and convergence of social media, location-based services, and the mobile channel. So-Lo-Mo marketing is a novel concept of providing smartphone and tablet users access to locally-focused promotions and store offerings through mobile searches based on their current location. For instance, suppose that a potential customer is looking for an Italian restaurant while walking in town. So-Lo-Mo-based mobile apps like Foursquare can provide instant search results and locations of restaurants with Italian cuisine in the customer's vicinity in addition to showing if the specific restaurant has special offers or if "friends" are available at the same location. This is an innovative method of targeting potential customers in a personalized and location-centric fashion. This multi-channel marketing approach enables businesses to promote their offers easily mainly because customers can receive highly relevant search results specific to their current location. [Venkatesan et al. \(2007\)](#) explore the drivers of multichannel shopping and provide evidence that this is associated with higher customer profitability. They propose that managers have the opportunity to grow customer profits by encouraging customers to shop in multiple channels. This multichannel experience potentially improves customer retention and customer growth, with multichannel customers allocating a higher share of wallet to the firm and therefore providing higher profits. They also support that marketing communications are critical in influencing customer channel choices, noting however that there is an optimal frequency of communications for each customer, and that over-communicating to customers can have dysfunctional consequences.

Consequently, planning a marketing strategy for the mobile channel is different from mass marketing strategies in that mobile marketing has the capability to target consumers directly with personalized marketing messages which could have advertising or promotional nature. [Dushinski \(2009\)](#), [Sankaran \(2011\)](#), and [Martin \(2015\)](#) believe that organizations should be aware of "where they are" and "where they want to be" when planning any marketing strategy including mobile and So-Lo-Mo features. When defining "where they are", organizations should conduct a complete and critical analysis of their current market shares, profits, product awareness, brand awareness, and product positioning in addition to reviewing the current status of their competitors. Marketers are increasingly combining mobile marketing with social media in order to deepen their interactions with consumers because it is estimated that by 2020, more than a billion people will access their favorite social media by using a mobile device, i.e. smartphones or tablets. Therefore, marketing campaigns should pay extra attention to this fundamental transition by first understanding the preferences of their mobile consumers ([Kats, 2012](#) and [Charlesworth, 2015](#)).

The research therefore proposes a conceptual framework that better illustrates and subsumes the attributes and strategic role of So-Lo-Mo in mobile marketing activities, offering a more flexible and more comprehensive understanding of its nature; including the underlying motivators of behavior on both sides of the B2C relationship ([Fig. 1](#)).



Fig. 1.

Conceptual B2C framework based on So-Lo-Mo

(Source: [Amirkhanpour and Vrontis, 2015](#)).

2.3. B2C smart retailing

[Shankar et al. \(2016\)](#) state that while the evolution of mobile technology is difficult to fully predict, two trends at the forefront are convergence and wearables. With regard to convergence, an overall question arises on how different technologies and parties involved in their development are going to converge and compete; especially as newer mobile technology that can understand and analyse user emotions captured through shopper-mobile interactions is becoming available. Regarding wearables such as fitness bracelets, smart watches, smart spectacles and smart apparel, they have made mobile shopper marketing even more interesting by allowing multitasking and augmented reality to come into play. 'Mobile shopper marketing' is defined as the planning and execution of all mobile-based marketing activities that influence a shopper along and beyond the path-to-purchase, and 'augmented reality' refers to the live view of a physical environment enhanced by computer-generated audio, video, and data information ([Shankar et al., 2016](#)). Through a wider perspective, [Shankar \(2016\)](#), further referring to the papers corresponding to this editorial, notes that "[a] behavioral outcomes like shares, clicks, and purchases to mobile advertising depend on a complex interplay of advertising goals, advertising elements, consumer, firm, market, and context factors [...b] the effectiveness of mobile promotions depends on a host of factors ranging from value-privacy trade-off, spatiotemporal targeting, proximity to purchase, multichannel behavior, social media, inter-media substitution, and channel disintermediation [...c] gamification elements like story, mechanics, aesthetics, and technology, together with consumer and product factors are key drivers of marketing outcomes like engagement, purchase, and retention [...and d] mobile marketing has a wide range of impact on shopper behavior during all the stages of a shopper's path-to-purchase and beyond and the key drivers differ across the different stages in the shopping cycle". In the spirit of the above and in the context of the holistic approach to the subject, this research deems 'smart retailing' to be a subject that is too wide, dynamic and complex, as a concept, to be given a definitive/simplified 'textbook' definition. And thus, the definition of smart retailing is deliberately and purposefully provided descriptively and contextually through the literature review, and enhanced/completed in a similar vein through the development and findings.

[Ngo and O'Cass \(2013\)](#) show that digital technology within traditional business models allows retailers to provide superior consumer experience, increased profitability, consumer participation to service delivery, and superior firm performance. [Pantano \(2014\)](#) underlines the need for new organizational capabilities and practices, consequent to the innovativeness of the new technologies.

Furthermore, [Pantano and Timmermans \(2014\)](#) identify the impact of the new technologies as supporting: (i) new ways for collecting and transferring knowledge from and to consumers, and managing information for developing new marketing strategies; (ii) the creation of smart partnerships with clients (who are actively involved in service co-creation); (iii) the development of new capabilities and strategies for fast replying to the organizational, technological, market and environmental changes, and successfully managing innovation; (iv) new way for accessing and consuming services and products; and (v) the building and maintenance of relationships with retailer. Smart retailing, therefore, is expectedly changing consumer behavior throughout the search, purchase, consumption and after-sales process ([Verhoef et al., 2009](#) and [Bates, 2011](#)).

Retailers are currently in the investment and adoption phase of smart digital technologies, a plateau on which consumer behavior and marketing practices have yet to catch up and get synchronized with technology ([Cardamenis, 2016](#) and [King, 2016](#)). The technology leading retail's evolution is E-Commerce and more specifically electronic retailing. Electronic retailing, mostly known as E-Tailing is retailing conducted over the Internet and those who conduct retail business online are called E-Tailers ([Turban et al., 2009](#) and [Ettenson et al., 2013](#)). Sound business thinking, visionary leadership, thorough competitive analysis, financial analysis, and the articulation of a well-thought-out E-Commerce strategy are essential for successful E-Tailing. [Vize et al. \(2013\)](#) suggest that this kind of shopping is convenient for those who have a hectic schedule and are reluctant to go to retail outlets. The transportation and delivery charges; however, are paid by the customers themselves.

Furthermore, [Aaker \(2011\)](#) believes that firms with successful new retailing concepts tend to have a strong vision that connects to a core customer group in addition to evolving over time, especially during the early days. For instance, IKEA first started small in scope and then expanded its vision as it became known to a huge audience worldwide especially by outsourcing assembly to customers.

The E-Tailing business models can be classified on the basis of the distribution channel(s) used. [Turban et al. \(2009\)](#) and [Bates \(2011\)](#) classify these channels as follows:

- Direct marketing by retailers

- Direct marketing by manufacturers
- Pure-play E-Tailers
- Click-and-mortar retailers
- Internet (online) malls

Most of the traditional mail-order retailers have added the internet as a new distribution channel maintaining their physical stores, but using direct marketing as their main distribution channel. On the other hand, manufacturers promote their products online from company sites directly to individual customers such as Dell, Sony, and Nike to name a few. Furthermore, the pure-play E-Tailers which are also known as virtual E-Tailers are firms that sell directly to consumers over the internet, without maintaining a physical sales channel. Amazon and eBay are pure-play retailers (King, 2016). Click-and-mortar retailers are businesses that combine E-Commerce activities with the utilization of physical premises to conduct their business (Bates, 2011 and Law, 2016). A small number of successful E-Tailers such as Dell and Expedia.com are now creating physical storefronts to leverage the brand power of the online environment to support more traditional trading activities via stores. Finally, the internet (online) malls, also known as electronic malls (E-Malls) or virtual malls are basically websites that bring together different electronic retailers at a single online location (Bates, 2011 and Samuely, 2016). For example, ASOS.com is the UK's largest online-only style and beauty retail store, carrying over 50,000 branded and own label product lines across womenswear, menswear and accessories. It allows visitors to narrow their search by trends and collection, as well as provides an online marketplace where they can buy and sell pre-owned products (Denomme, 2012).

Vize et al. (2013) and King (2016) believe that one of the big talking points in the retailing industry is mobile and the opportunity to manage cross-marketing initiatives beyond physical bricks-and-mortar. Mobile removes the physical barriers to retail sales and promotion of goods. Moreover, retailers who have their order management and inventory visibility processes in order will be best positioned to incorporate the mobile channel into the consumer shopping experience to take advantage of the growing consumer interest. A mobile retailing platform should incorporate several elements which are specifically made for the mobile channel in order to be successful among the customers. These elements mainly include SMS marketing, mobile coupons and vouchers, smartphone- and tablet-specific mobile retail applications, and mobile transaction payments (Cardamenis, 2016 and Samuely, 2016). As a result, for a mobile retailing platform to be successfully adopted by customers, marketers and retailers need to get the customers' permission and consent before starting the interaction. This helps building trust and transparency between the marketers and the customers. Consequently, D'Alessio (2015) and Samuely (2016) emphasize that mobility and the expectations that come along with it have dramatically changed the retail landscape. With more ways to connect and the pervasive influence of social media and mobile devices, customers expect more from retailers as they shop both in-store and online. Keeping digital customers satisfied and engaged requires new approaches to mobility which are further discussed in the next sections of this paper.

2.4. Narrative elucidations

Bringing forward the main findings of this section (2) we see that since the launch of smartphones and tablets, consumer behavior toward marketing, shopping, entertainment, and information sharing has been rapidly changing. In other words, modern consumers consider their mobile devices to be their tickets, loyalty cards, and even personal wallets to search, shop, communicate, inform, read news and respond to advertising and marketing messages. Inescapably, every day more retailers are incorporating mobile marketing into their marketing mix in order to communicate effectively and efficiently with their customers; and to facilitate interactions, purchases and value exchanges in general. The main purpose of mobile marketing in this context is to (a) increase the awareness level of businesses by assisting them in gathering relevant information about the needs and preferences of their target customers in a timely and profitable manner, (b) enable the functional interaction of online retailing, and (c) enhance the interaction between the potential customers and their favorite brands, through the mobile channel attributes of intimacy, immediacy, intelligence, and innovation (be it the actual retailer brand, its house brands or the spectrum of its product brands).

In order for a retailer to connect with its target market successfully, innovative forms of marketing and advertising have to be deployed in conjunction with traditional marketing methods. Mobile marketing is an important digital marketing communication channel to be considered by retailers to reach out to

their target customers using an effective technique. It should be taken into consideration that mobile marketing opens new horizons for businesses and marketing managers which will ultimately result in increasing sales and consumer traffic, driving offline sales up by incorporating location-based search strategies, and building customer loyalty and trust by asking for their permission prior to initiating a marketing dialogue with them. Customers are, in a sense, addicted to mobile phones and use them for online shopping, social networking, reading books, and other things in addition to making phone calls. Connecting with mobile customers helps retailers keep them informed and updated about various issues such as launching new products or services, special offers, sales periods, special promotions and other issues in addition to gaining more credibility in comparison with their competitors.

Interrelating the narrative theoretical outcomes of the research towards a comprehensive understanding of smart retailing was noticeably more complex than originally assumed. The difficulty was not linked to the expected complexity of the subject, but to three specific aspects of it. Firstly, it is evident that scientific marketing research, owing to the long publication processes involved, generally cannot keep up with the pace of change of mobile marketing technology. Secondly, the pace of change of consumer behavior itself is influenced by the mobile channel, i.e. the mobile consumer behavior is significantly fast changing due to the technological advancements in mobile marketing. The third aspect originates from the second and has to do with the evident focus of literature on the functional attributes of mobile marketing, neglecting (partially) its contextual attributes and underlying motivators.

In other words, while existing research exhibits the practical benefits and determinants of mobile marketing (such as mobility, cost, profitability, usability and ubiquity), they are not equally successful in linking it with the emerging consumer behavior. *The findings of the narrative theoretical research therefore, show that the subject of smart retailing interactions cannot be truly understood unless studied in a comprehensive, multi-perspective manner. Moreover, even this approach demanded that, in the spirit of orthodox marketing principles (albeit innovatively applied), interrelationships and power balances between the various actors (businesses, consumers, society) are only properly captured in the context of value-based analysis.* This research, thus, subsequently applies such an analysis and proceeds to identify and categorize the values involved; and perhaps even more importantly, conceptually at least, to map the relative position and influence of the relevant forces (see next [Section 3](#)).

3. Value-based conceptual development

Stemming from the preceding narrative literature review ([Section 2](#)), the scientific need arises to understand smart marketing (in general) and retailing (specifically) in a multi-dimensional context. Irrevocably, this necessitates a multi-perspective analysis, whose complexity is methodologically challenging as it requires business, functional, personal, psychological, cultural and social factors of consumer behavior to be incorporated within a single framework. The research, therefore, undertakes a devolution of the narrative theoretical findings to work on the first principles of marketing, namely 'value'. Through this single 'currency' the multiple perspectives on B2C smart retailing are hereby ([Section 3.2](#) below) interrelated into a unified system that portrays the interrelationship of the different factors involved, as well as the underlying motivators of behavior on both sides of the B2C bond. To achieve this, the research has undertaken a second, more focused, meta-synthetic literature review ([Section 3.1](#) below) which allowed the transition from the functional to the comprehensive understanding of the subject by identifying, introducing and delineating the more intangible, softer and abstract aspects of B2C smart retailing.

3.1. A multi-perspective consumer-focused theoretical meta-analysis

The significance of consumer behaviour knowledge rests on the foundation of modern marketing philosophy which recognises the consumer as being the focus of marketing activity. In contemporary markets, consumers' influence on business has been steadily increasing over the past few decades, empowering and crowning them sovereigns among the forces shaping business environments ([Schiffman and Kanuk, 2004](#), [Kotler and Keller, 2015](#), [Blackwell et al., 2006](#) and [Solomon, 2015](#)). The contemporary markets bear a number of characteristics that facilitate this phenomenon: high economic productivity and prosperity, the freedom that largely characterises business activity, high education and administration levels, technological superiority, the comparative importance of knowledge and information versus other economic factors, and a socio-cultural environment that

supports personal and collective development and expression (Steiner and Steiner, 2000, Keegan and Schlegelmilch, 2001, Chan and Chui, 2004 and Thrassou, 2007).

These factors not only result in different motivators (Rayner and Easthope, 2001), but also in considerably more complex motivational processes; themselves resulting in both quantitative and qualitative upgrades in the consumer decision-making process of a developed-country consumer (Yi and Baumgartner, 2004 and Esch et al., 2006). The contemporary markets' consumer decision-making process therefore, is found to differentiate itself in three ways: its complexity, its upgraded significance to marketers, and the fact that the majority of consumption relates to the satisfaction of 'higher' needs (Rayner and Easthope, 2001, Blackwell et al., 2006 and Zeithaml et al., 2006). Vrontis and Thrassou (2007a) found that the highly competitive environment necessitates for businesses, both the understanding of the nature of demand and the ability to satisfy it. Intense competition means that greater value is frequently offered through means such as innovation (Mukherjee and Hoyer, 2001), augmented products/services/ideas, customisation, personal attention, convenience and others (Naumann et al., 2001 and Thøgersen and Ölander, 2002). Furthermore, simply meeting expectations is often not enough. Organisations have to surpass expectation to meet the prerequisites of quality (Foreman, 2000, Naumann et al., 2001, Gupta and Lehmann, 2002 and Blackwell et al., 2006). An additional option is the ability of organisations to create innovative *value* (Bresciani et al., 2013 and Chebbi et al., 2013) and perception often becomes a more critical parameter than reality itself (Naumann et al., 2001, Palmer and Ponsonby, 2002, McCullough et al., 2004 and Thrassou and Lijo, 2007).

Drawing from the works of Chebbi et al. (2013), Thrassou et al. (2012) and Vrontis et al. (2012) we find that value considerations fall into three categories of research perspective requirements: the 'Value-defining' ones, the 'Process-defining' ones, and the 'Context-defining' ones. Continuing, the research identified seven different main types of 'value' and note that two very difficult concepts must be mastered, in the same context: on the one hand, the interdependencies between the business and the consumer needs, and on the other, the notion of value and its role in the design and development of the organisational product. Value appears to offer itself in a multitude of manifestations, each of which has a different relative weight depending both on the product and the individual stakeholder. These value manifestations additionally can be subtly segregated into two categories: the 'soft' and 'hard' ones. The latter relate to value stemming from technological, functional, financial, procedural, and/or time-related elements; while the former (soft) stem from psychological, mental, sensory and/or image-related innovations.

Further to identifying potential values however, a practical choice needs to be made by managers regarding the values that actually need to be developed, for whom and how. To effectively achieve this, managers need to (a) identify the internal and external stakeholders and actors of their potential value propositions, (b) undertake research that will relate weighted value manifestations with individual stakeholder segments, and (c) develop the necessary competencies towards the production of the values found to be most significant.

Focusing further and specifically on retailers, Solomon (2015) identifies the reasons for traditional shopping as being: 'social experiences', 'sharing of common interests', 'interpersonal attraction', 'instant status', and 'the thrill of the hunt'. These are largely transferable to virtual shopping and constitute the basis of motivators on which smart retailing should build on. Similarly, and additionally, Blackwell et al. (2006) list more motivators of shopping as being: 'role playing', 'diversion', 'self-gratification', 'learning about new trends', physical activity', 'sensory stimulation', 'social experiences', 'sharing common interests', 'peer group attraction', 'social status' and 'pleasure of bargaining'.

Conversely, Solomon's (2015) traditional shoppers' perceived risks are both inhibitors of smart retailing, but at the same time potential motivators if reduced versus traditional retailing. These risks are: 'monetary', 'functional', 'physical', 'social', 'psychological' and 'temporal'. Monetary risk occurs when making a poor choice will have a monetary consequence; functional risk is the risk that the product may not function as the consumer needs; physical risk is the risk that the choice may physically threaten the consumer; social risk is the risk that the choice will reflect poorly on the consumer and damage his or her self-esteem or confidence; psychological risk is the risk that one may lose self-respect due to making a bad decision; and temporal risk is associated with the risk of time loss. In the same context, shoppers perceived costs (monetary, social, temporal, psychological, physical etc.) are traditional shopping inhibitors, but smart shopping potential motivators. Comparing 'clicks versus bricks' he identifies the main benefits as being 'good customer service', 'more options', and 'more convenient'; and the main limitations as 'lack of security', 'fraud', 'missing the actual shopping experience', and 'shipping charges'.

Solomon (2015), further expands on online retailing consumer behavior underlining the importance of online/virtual shopping-influencing communities, whose characteristics are: 'the more users, the better', 'monetized based on number of users', 'free', 'constantly improving', 'posts categorized by folksonomies', and 'have a sense of cyberspace'. Though online communities exist virtually rather than at a physical location, the better ones supply tangible characteristics, called presence, that create the sensation of actually being in a place. Just as your offline communities are based on family, religious beliefs, social activities, hobbies, goals, place of residence, and so on, your online communities also need commonalities to create bonds among the members. This is called collective interest. The political model of most online communities is democratic, meaning rule by the people. Virtual communities need rules that govern behavior in order to operate. For an online community to thrive, a significant proportion of its members must participate. In fact, the larger an online community is, the more likely it will thrive. This is known as the network effect. Online communities benefit from crowd power. Social Shopping Web Site Categories are also identified and listed to include: 'virtual wish lists', 'try it on sites', 'pre-purchase feedback', 'competitions', 'social advocacy', 'group purchasing', and 'linking and networking'.

In a similar context, social networks are delineated as made up of nodes (or members) and the connections between those nodes, called ties. The ties indicate relationships between the members. When nodes connected by ties interact, a flow occurs between the nodes. Flows can occur in multiple directions and across multiple media, which we call media multiplicity. Social networks are typically oriented around an object, which we call social object theory. Because of social networks, word of mouth communication definitely travels more than it would otherwise. Opinion leaders known as Mass Connectors are empowered by online communities which result in powerful influence impressions which spread due to the momentum effect. WOM communication about products, especially from opinion leaders, may be more influential than information from marketers; and Web 2.0 accelerates the speed of delivery and the power of WOM communication (Solomon, 2015).

Finally, Amirkhanpour et al. (2014), provide the first smart marketing framework to significantly focus on the subject of 'value', albeit in a wider strategic marketing context and not retail-specific (Fig. 2). The authors compare the traditional role of mobile marketing versus its contemporary (smart) role, as shaped by technological and consumer behavior changes. The traditional role is described as simpler, more mechanistic, structurally unidirectional and functionality-oriented. Contrariwise, the contemporary structure is found to be more complex, multidirectional, So-Lo-Mo marketing oriented/absorbed. They also adopt the division of values into 'hard' and 'soft' ones; with the former being functional and tangible, and the latter being more abstract and intangible e.g. brand, image, affective connotations, social symbolisms and anthropomorphic associations. The authors state, predictively, and largely defining the starting point of this paper's conceptual development, that *'mobile marketing theory and practice must transcend its functionally descriptive character, to prescribe mobile marketing's role in the consumer behavior context, not simply towards best fitting in it, but towards defining it'* (Amirkhanpour et al., 2014, p.265).

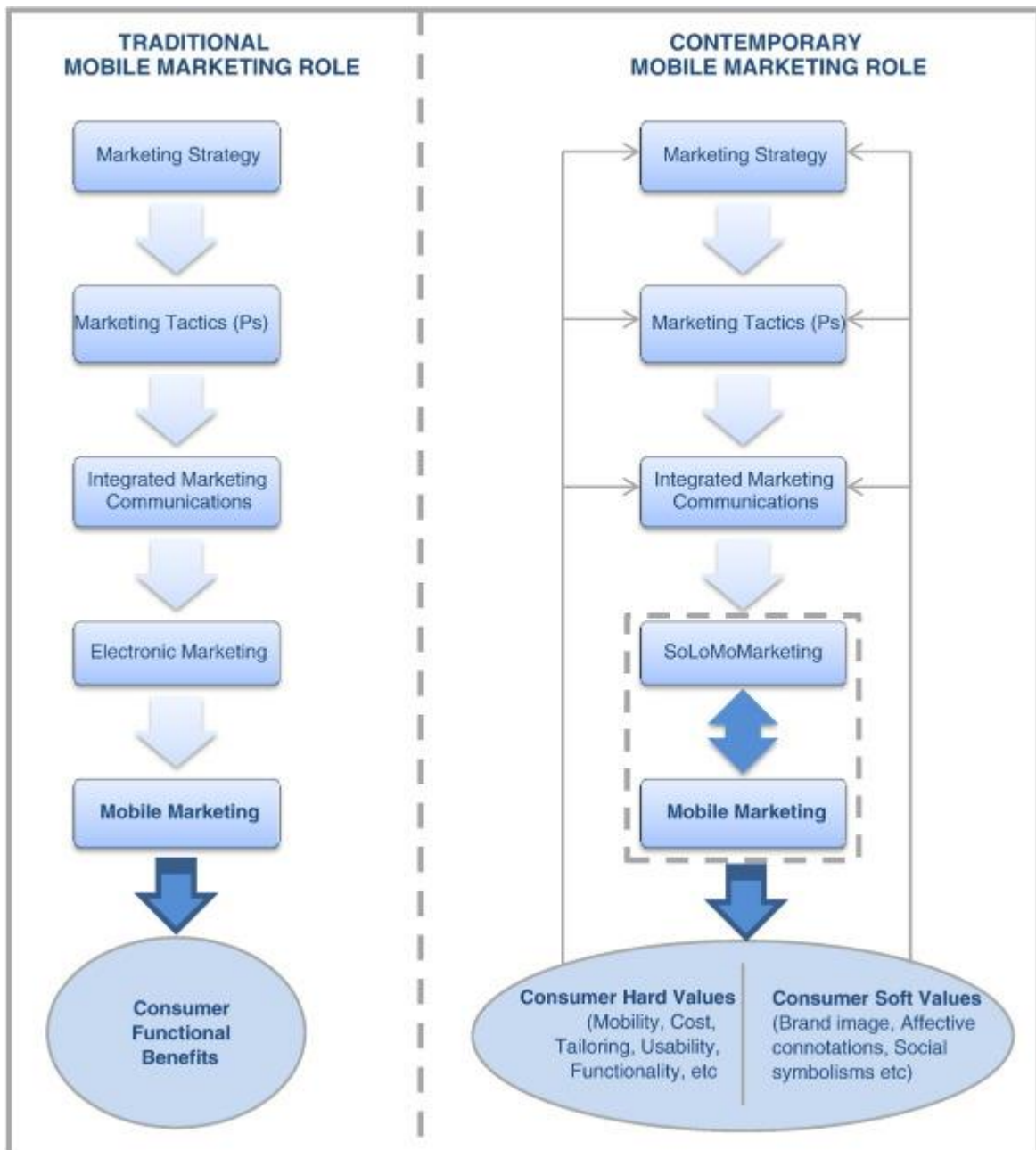


Fig. 2.

A preliminary strategic mobile marketing contextual framework.
 (Source: Amirkhanpour et al., 2014).

3.2. Developing a value-based multi-dimensional framework of B2C smart retailing interactions

Overlaying the above to the theoretical research of [Section 2](#), it is an irrevocable conclusion that for retailers, 'value' must be the absolute measure in the development of their strategic decision making process. This simple fact lies at the heart of contemporary marketing philosophy and yet grasping it still appears difficult for many retailers, who still base their decisions on the more tangible strategic elements of cost, functionality etc. Even among the increasing number of executives who have inevitably converted to the more effective, value-based approach, the dilemmas are still difficult and crucial. 'Value' persistently emerges as a critical and defining factor, at both the strategic and procedural levels; yet no taxonomy or categorization of values was uncovered for the smart retail sector. This paper therefore, brings forward the knowledge obtained through its research to

prescriptively develop a single, comprehensive, provisional, value-based multi-dimensional framework of the retailing business-consumer smart interaction system (Fig. 3).

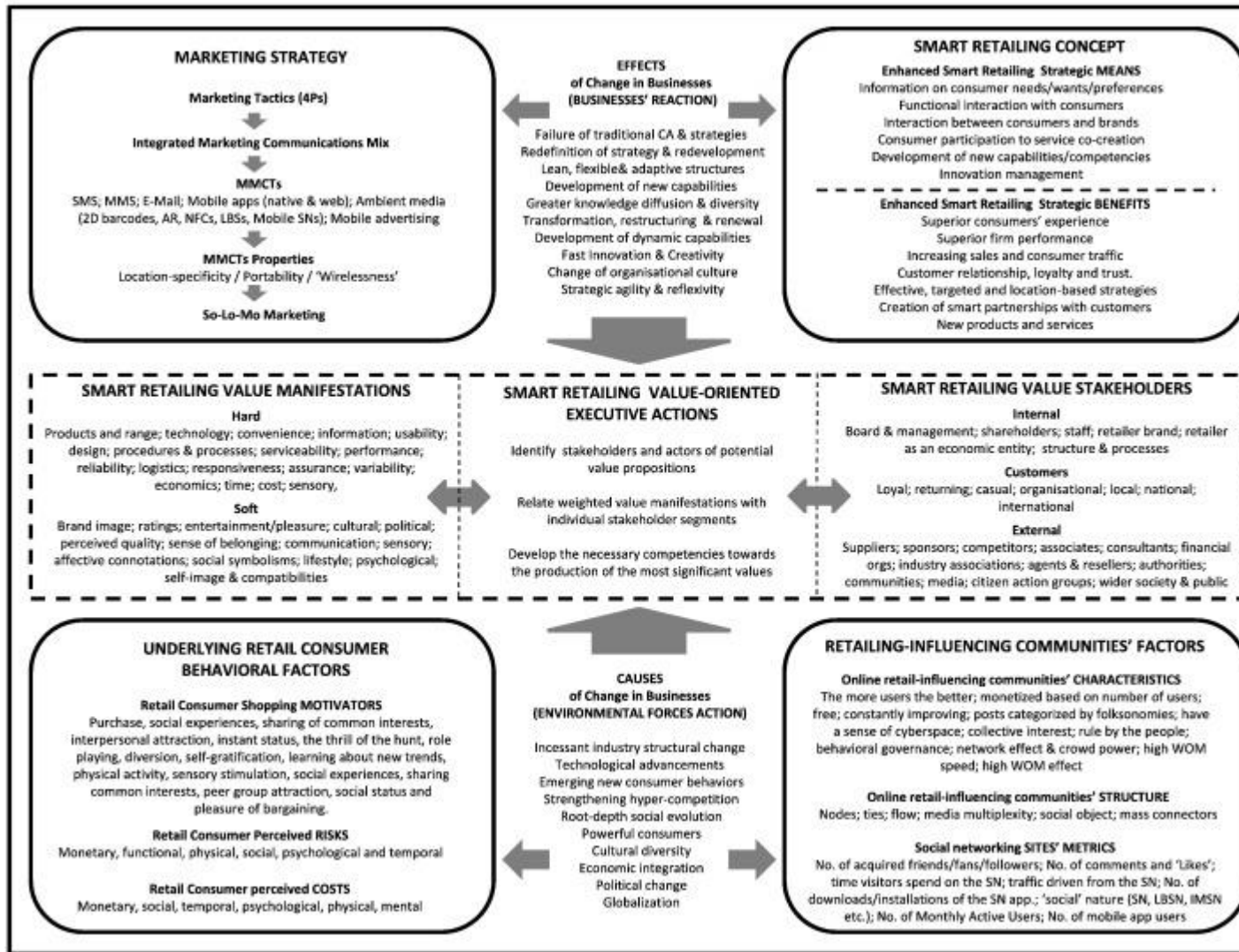


Fig. 3.

A value-based multi-dimensional framework of the retailing B2C smart interaction system (Source: Research Developed).

The framework incorporates comprehensively the major business and contextual factors affecting smart retailing, interrelating them and superimposing them on the main elements of value. Specifically, resting on the findings of the narrative and meta-synthetic theoretical research, and refined through the experts' interviews, the framework incorporates:

- The shifting business environment factors
- The shifting business practice factors
- The generic underlying motivators of retailing consumer behaviour
- The smart marketing strategy process
- The smart retailing means and benefits
- The retailing-influencing online community factors
- The smart retailing value manifestations

- The smart retailing value stakeholders, and
- The smart retailing value-oriented executive actions

Elucidating the framework, the *shifting business environment factors* are listed and denoted as the underlying forces of change amongst business (bottom of the figure). These factors are also shown to affect/shape the *generic underlying motivators of retailing consumer behaviour*, including also its *perceived costs* and *risks*. Similarly, the shifting business environment factors underlie the development of *online social networks*, and through these, the rise of *online communities as decisive retailing-influencing forces*. The latter are presented along with their marketing-related *characteristics, structure* and *metrics*.

On the other side of the causes (upper part of the figure) the framework presents the effect of the above in the form of *businesses' strategic reaction*. In this context the latter factors shape the schematically presented *marketing strategy*, leading to *MMCTs* and *So-Lo-Mo* marketing (see narrative literature review, [Section 2](#)). Correspondingly, on the upper right of the figure, the *smart retailing concept* is portrayed in the form of its *means* and *benefits*. The authors consciously segregated smart marketing from the MMCT/So-Lo-Mo marketing as the theoretical research has indicated that consumer and technological etc. changes give rise to smart marketing as a holistic business approach that cannot be limited to the confines of a simple marketing tactic/tool.

All the above environmental, consumer and marketing factors are finally shown to culminate on the development of *value*, both as the means and ends of smart retailing implementation. As such, the framework presents the *value manifestations* in two forms: the *soft* and *hard* values, whose composition has been derived, refined and presented consequent to the superposition of the findings of the narrative ([Section 2](#)) and the meta-synthetic ([Section 3.1](#)) literature reviews. In the same manner, the framework identifies the main *value stakeholders* and actors and divides them into three categories: the *external*, the *internal* and the *customers*. Finally, at the framework's epicentre lie the three *smart retailing value-oriented executive actions* prescribed as the most important steps to developing a value-based smart retailing marketing strategy.

4. Conclusions, implications and further research

4.1. Conclusions

The research has undertaken an extensive narrative and meta-synthetic theoretical analysis, refined through primary qualitative research. It has thus successfully met its objectives of identifying the value categories and individual elements, which explicitly or implicitly define the smart retailing business-consumer relationships and synergies; and (mostly) descriptively and (partially) prescriptively delineate these through a provisional, comprehensive, value-based multi-dimensional framework of the retailing business-consumer smart interaction system.

The findings bring to the surface a number of conclusions:

1. 'Value' constitutes a superior *means* of understanding the smart retailing business-consumer interaction, as it allows a holistic and comprehensive understanding of the synergies, exchanges, risks, and benefits of the relationship to both.
2. 'Value' constitutes the ultimate *ends* on both sides of the relationship, as both the contemporary retail business and the contemporary consumer are defined by environmental factors that produce business and consumer motivators that far exceeds the simple traditional ones of cost, functionality etc.
3. Focus on 'value', particularly through its 'soft' manifestations, allows retailers the strategic flexibility to develop competitive advantages that are unique, inimitable and less-resource demanding. This further alleviates smaller retailers from the disadvantages of economies of scale, strengthening their position against both small and large players.
4. Smart retailing, has outgrown its traditional role of a set of tools within a wider set of marketing tactics, to become a holistic strategic approach to retailing.
5. Smart retailing appears to not simply enhance the retailer's position against consumers' benefits, risks and costs, but to actually redefine them and turn them into advantages through the utilization of business and social synergies.

6. Smart retailing, particularly through consumers' social networks, has 'invaded' consumers' lives, but correspondingly, even proportionately, consumers have 'invaded' retailers marketing processes.

7. Both parties appear disarrayed by the above phenomenon, but the inevitability of its growth seems to force the relationship into a strongly interactive synergy, and into an equilibrium of power and mutual respect, as the only means of preserving the relationship.

In all, perceiving smart retailing through the measure of value exchanges and actors facilitates the understanding of a business that is new, complex and incessantly shape-shifting. The implications of this – essentially strategic – approach are significant in both the scholarly and the executive contexts (see following section).

4.2. Implications and further research

The research findings are by nature scholarly, but of equal executive worth. In scholarly terms, the findings allow researchers to better understand the underlying causes and implicit effects of smart marketing within a wider context; thus providing a reliable provisional theoretical framework for both further development and testing. Additionally, the research findings transcend the rather descriptive orientation of most theory-based related researches to provide a framework that is not only prescriptive, but also predictive, once specific parameters are defined.

Further to the above general conclusions ([Section 4.1](#)) of the main scholarly implications we underline the elucidation that tangibility and intangibility are factors even within a virtual environment. The former is found to relate to the hard and the latter to the soft value manifestations. Moreover, physical tangibility is a major factor in the frequent case of retailers holding physical and virtual operation, with the latter creating a sense of tangibility that stems from consumers' physical encounter with the retailer. Of both scholarly and executive importance is also the implication of internationality. Though this was not the focus of the research, the strength of the soft value manifestation (inherently culture-bound) indirectly point towards a difficult dilemma relating to international adaption or standardisation ([Vrontis and Thrassou, 2007b](#)) of their product design.

At a more tactical level, and perhaps more of executive value, this paper equips managers with a framework that is generic enough to be applied to most business contexts, and potentially explicitly practicable, subject to adaptation to business-specific contexts. The framework helps business leaders understand why and how smart marketing should be applied; and also to identify and define the inter-channel and intra-channel level interactions and synergies that will add the greatest value across their marketing system. The framework however, though smart-retailing-focused is still generic and only provides the 'ingredients' and 'recipe principles' for the design of a smart retailing marketing strategy of individual businesses. Its practical application therefore, to individual business, inevitably requires refinement and adaptation according to the specific characteristics, environmental contexts and strategic orientations of individual business.

Potential, beyond-the-obvious (such as 'investment in technology' etc.), practicable considerations however, could include: (a) the preservation or development of physical retailing stores, possibly at high-profile locations, even when these make little economic sense, to enhance/strengthen parallel on-line operations; (b) the redefinition of target-markets and product/brand images according to better value propositions, particularly of soft manifestations; (c) the reappraisal and redefinition of value considerations along the whole spectrum of stakeholders, including internal, external and international ones; (d) the value-based segmentation of customers that considers not only the customer value per se, but the cost of creating value *for* the customer, which would practically potentially shift attention even more towards the soft value manifestations (see [Fig. 3](#)); (e) the utilization of customer virtual communities through strategic value-based 'pulling', as opposed to promotional/informational 'pushing'; and (f) the utilization of multi-channelling towards the (traditionally unorthodox) development of different marketing tactics ('mixes') for different audiences, for the same businesses/brands/products.

A scholarly implication, as well as a direction for *further research*, is the evident, but not so much confessed reality that the pace of change of smart retailing is such that scientific business research appears to always be a step behind industry application. While this is not uncommon in the context of an incessantly changing business and technological/social environment, it is particularly true for smart retailing. It is thus suggested that future research on the subject might increase the relative weight of 'fresh' secondary data available at the expense of mainstream scientific sources whose availability is

bound by procedural delays. Beyond this realization however, further research needs to develop along three axes: 'context', 'focus' and 'method'. Regarding 'context', future research may develop horizontally i.e. adopt/adapt the findings to other sectors than retailing; or vertically i.e. adopt/adapt the findings to specific profiles of retailers, either by industry or nature. Regarding 'focus', further research may concentrate on individual aspects of the findings e.g. developing relative weights of value manifestation versus stakeholders, or constructing prescriptive strategic marketing planning processes for smart marketing. Regarding 'method', the predominantly conceptual nature of the paper demands for further testing, validation and refinement through empirical methodological tools.

4.3. Catalectic observes

The findings of this research and the framework developed are neither definitive nor absolute. They are simply an alternative perspective to the mechanistic ones provided by authors over the last two decades; a less conventional aspiration to detach the concept of smart retailing from its immediate practical aspects and to place it within a wider consumer-oriented context. The aim is not to offer a different point of view as an end in itself, but to propose a value-added implementation that better fits contemporary strategic marketing theory and practice. As a concluding remark, this research finds smart marketing to be more than a reflexive or even reactive application to a changing business and technological environment. It highlights it as a proactive and transformative tool towards shaping these environments. It is a perpetually innovative medium to achieving strategic goals; and its innovativeness is not simply technological, but in fact contextual and systemic.

Transcending the ascetic scholarly notions and terms, nonetheless, the research capitulates with an undeniable confession. Smart retailing and its peripheral notions, concepts, factors, forces and elements are ultimately beyond the control or even true understanding of any scientist or manager. Its complexity, coupled with its incessant shape-shifting, appears to negate any efforts to predict and prescribe long-term strategies with confidence. And while we, scholars, shall irrevocably continue to scientifically and methodically build our understanding of the subject, executives are called upon to draw significant knowledge from our findings, but will ultimately have to apply it alongside their own experience, instinct and prayers.

References

- D. Aaker Eight characteristics of successful retail concepts [Internet] Retail Customer Experience Available from: http://www.retailcustomerexperience.com/article_print/178752/ (2011) (Accessed 16 May 2012)
- A.S. Al-Khalifa, H.S. Al-Khalifa Emerging URL patterns in mobile websites: a preliminary result Elsevier Procedia Computer Science (ANT 2012 and MobiWIS 2012), Vol. 10 (2012), pp. 952–959
- J.S. Al-Suwaidi From Tribe to Facebook: The Transformational Role of Social Networks The Emirates Center for Strategic Studies & Research (ECSSR), Abu Dhabi, UAE (2013)
- M. Amirhanpour, D. Vrontis Mobile marketing: the invincible So-Lo-Mo driver 3rd Asian Business Research Conference (ABRC), INSEAD Business School, Abu Dhabi, United Arab Emirates (UAE) (2014) (September 15–16)
- M. Amirhanpour, D. Vrontis Mobile marketing: a new technology for management innovation International Conference on Organization and Management (ICOM), Abu Dhabi University, Abu Dhabi, United Arab Emirates (UAE) (2015) (November 22–23)
- M. Amirhanpour, D. Vrontis, A. Thrassou Mobile marketing: a contemporary strategic perspective Int. J. Technol. Market., 9 (3) (2014), pp. 252–269 (Special Issue on Building New Business Models for Success)
- G. Armstrong, P. Kotler, M. Harker, R. Brennan Marketing: An Introduction (3rd edition) Pearson, Harlow (2015)

- P. Bates Retail industry is ripe for mobile [Internet] E-Commerce Times Available from: <http://www.ecommercetimes.com/story/71835.html/> (2011) (Accessed 16 May 2012)
- S. Bellamkonda Study finds 84% of small business see business increase through mobile marketing [Internet] Washington Business Journal Available from: <http://www.bizjournals.com/washington/blog/2012/05/> (2012) (Accessed 10 May 2012)
- D. Berkowitz Social gaming [Internet] SlideShare Available from: <http://dawnregg.com/smedia/?tag=social-media-strategy> (2010) (Accessed 25 April 2012)
- R.J. Blackwell, P.W. Miniard, J.F. Engel Consumer Behaviour (10th International edition) Thomson - South-Western (2006)
- M. Blazquez Fashion shopping in multichannel retail: the role of technology in enhancing customer experience Int. J. Electron. Commer., 18 (4) (2014), pp. 97–116
- F. Brassington, S. Pettitt Essentials of Marketing (3rd edition) Pearson Education Limited, Essex (2013)
- S. Bresciani, A. Thrassou, D. Vrontis “Change through Innovation in Family Businesses: evidence from an Italian Sample”
World Review of Entrepreneurship, Management and Sustainable Development, 9 (2) (2013), pp. 195–215 (ISSN: 1746-0573 Inderscience)
- S. Brown Recycling postmodern marketing Mark. Rev., 6 (2006), pp. 211–230
- M.J. Brown Social Media Marketing (2nd edition) Create Space Independent Publishing Platform (2015)
- F. Cardamenis Discipline and Digital Drive Growth as Consumers Begin Dictating Relationships
Mobile Commerce Daily (2016) (Retrieved 9 June 2016)
- D. Chaffey Marketing Trends for 2016 – Will We Be in a Post-digital Era? Smart Insights (2016) (Retrieved 27.6.2016)
- D. Chaffey, F. Ellis-Chadwick Digital Marketing (6th edition) Pearson, Harlow (2015)
- T. Chan, G. Chui Consumer attitudes towards marketing in a transitional economy: a replication and extension J. Consum. Mark., 21 (1) (2004), pp. 10–26
- A. Charlesworth An Introduction to Social Media Marketing Routledge (2015)
- H. Chebbi, D. Yahiaoui, A. Thrassou, D. Vrontis The exploration activity's added value into the innovation process Glob. Bus. Econ. Rev., 15 (2/3) (2013), pp. 265–278 <http://dx.doi.org/10.1504/GBER.2013.053073> (ISSN : 1097-4954, Inderscience)
- L.T. Christensen, S. Tord, A.F. Firat Integrated marketing communication and postmodernity: an odd couple? Corp. Commun., 10 (2005), pp. 156–167
- B. Cova, P. Maclaran, A. Bradshaw Rethinking consumer culture theory from the postmodern to the communist horizon Marketing Theory, SAGE Publishing (2013) <http://dx.doi.org/10.1177/1470593113477890>
- A. Csikosova, M. Antosova, K. Culkova Strategy in direct and interactive marketing and integrated marketing communications Procedia Soc. Behav. Sci., 116 (2014), pp. 1615–1619 (Elsevier Science Direct)
- N. D'Alessio The evolution of mobility in retail [Internet] Innovative Retail Technologies, Available from: <http://www.innovativeretailtechnologies.com/doc/the-evolution-of-mobility-in-retail-0001> (2015) (Accessed 24 July 2016)

- K. Dam One small step for marketers, one giant leap for mobile marketing [Internet] E-Web Marketing Available from: <http://www.ewebmarketing.com.au/blog/> (2012) (Accessed 15 May 2012)
- H. Demirkan Enhancing e-commerce outcomes with IT service innovations *Int. J. Electron. Commer.*, 19 (3) (2015), pp. 2–6
- H. Demirkan, J. Spohrer Developing a framework to improve virtual shopping in digital malls with intelligent self-service systems *J. Retail. Consum. Serv.*, 21 (5) (2014), pp. 860–868
- J. Denomme Top 10 online shopping sites [Internet] Huffington Post Style Canada, Available from: http://www.huffingtonpost.ca/2012/10/26/top-online-shopping-sites_n_2025607.html (2012) (Accessed 20 July 2016)
- U.M. Dholakia, R.P. Bagozzi, L.R. Klein A social influence model of consumer participation in network and small group-based virtual communities *Int. J. Res. Mark.*, 21 (3) (2004), pp. 241–263
- K. Dushinski *The Mobile Marketing Handbook* Information Today, Inc., New Jersey (2009)
- F.R. Esch, T. Langner, B.H. Schmitt, P. Geus Are brands forever? How brand knowledge and relationships affect current and future purchases *J. Prod. Brand Manag.*, 15 (2) (2006), pp. 98–105
- R. Ettenson, E. Conrado, J. Knowles Rethinking the 4 P's *Harv. Bus. Rev.* (2013) (Retrieved 2 February 2013)
- L. Evans *Social Media Marketing* QUE Publishing, Indianapolis, Indiana, USA (2010)
- A. Fink *Conducting Research Literature Reviews: From the Internet to Paper* (3rd edition) SAGE Publications (2010)
- A.F. Firat, A. Venkatesh Postmodernity: the age of marketing *Int. J. Res. Mark.*, 10 (1993), pp. 227–249
- S. Foreman Marketing assets: branding communities, customer loyalty and relationships *Manager Update*, 12 (1) (2000)
- C. Frangold AT & T's new mobile features: this is just the beginning [Internet] Seeking Alpha. Available from: <http://seekingalpha.com/article/563811-at-t-s-new-mobile-features-this-is-just-the-beginning/> (2012) (Accessed 7 May 2012)
- M.N. Frolick, L. Chen Assessing m-commerce opportunities *Inf. Syst. Manag.*, 21 (2) (2004), pp. 53–62
- E. Gaskin Marketing innovation defined [Internet] C-Suite Insider Available from: <http://www.csuiteinsider.com/marketing-innovation/> (2013) (Accessed 12 July 2015)
- B. Gilbreath *The Next Evolution of Marketing: Connect with your Customers by Marketing with Meaning* McGraw-Hill, New York (2010)
- M. Guberti Why SMS marketing is crucial for your business *Westchester Cty. Bus. J.*, 51 (39) (2015), p. 20
- S. Gupta, D.R. Lehmann What are your customers worth? Not all customers are created equal. You need to know their lifetime value, then compare the cost of acquiring, serving, and keeping them *J. Pers. Sell. Sales Manag.*, 22 (3) (2002), pp. 207–209
- M. Hamouda, A. Gharbi The postmodern consumer: an identity constructor? *Int. J. Mark. Stud.*, 5 (2) (2013), pp. 41–47
- A. Hanlon *The 4Cs Marketing Model Smart Insights* (2015) (Retrieved 2 February 2015)

- E.C. Hirschman, M.B. Holbrook Postmodern Consumer Research Sage Publications, Newbury Park (1992)
- D.B. Holt Poststructuralist lifestyle analysis: conceptualizing the social patterning of consumption in postmodernity J. Consum. Res., 23 (1997), pp. 326–349
- J. Hopkins, J. Turner Go Mobile John Wiley and Sons, Inc., New Jersey (2012)
- G. Jackson, V. Ahuja Dawn of the digital age and the evolution of the marketing mix J. Direct Data Digit. Mark. Pract., 17 (3) (2016), pp. 170–186
- D. Jobber, F. Ellis-Chadwick Principles and Practice of Marketing (8th edition) Berkshire, McGraw Hill Higher Education (2016)
- R. Kats Mobile minefields – and how to avoid them [Internet] Mobile Marketer: the news leader in mobile marketing, media and commerce Available from: <http://www.mobilemarketer.com/cms/news/strategy/12815/> (2012) (Accessed 15 May 2013)
- W.J. Keegan, B.B. Schlegelmilch Global Marketing Management – A European Perspective Prentice Hall (2001)
- D. Kerpen Likeable Social Media McGraw Hill, New York (2011)
- J. King Current Retail Technology and Consumer Behavior Not Yet in Sync: Report Mobile Commerce Daily (2016) (Retrieved 13 June 2016)
- J. Klein Mobile Marketing: Successful Strategies for Today's Mobile Economy, USA (2013)
- P. Kotler, K. Keller Marketing Management (15th Global edition) Pearson Education Limited, Essex (2015), pp. 25–239
- P. Kotler, K.L. Keller, M. Brady, M. Goodman, T. Hansen Marketing Management Prentice Hall, Harlow (2009), p. 6 (58, 129, 703-708, 735-739, 863-867)
- P. Kotler, K. Keller, M. Brady, M. Goodman, T. Hansen Marketing Management (3rd edition) Pearson Education Limited, Harlow (2016)
- C. Krum Mobile Marketing: Finding Your Customers No Matter Where They Are Pearson Education Inc., Indianapolis (2010)
- V. Kumar, X. Zhang, A. Luo Modeling customer opt-in and opt-out in a permission-based marketing context J. Mark. Res., 51 (4) (2014), pp. 403–419
- L.I. Labrecque, J. vor dem Esche, C. Mathwick, T. Novak, C.F. Hofacker Consumer power: evolution in the digital age J. Interact. Mark., 27 (4) (2013), pp. 257–269
- K.C. Laudon, J.P. Laudon Management Information Systems (14th edition) Pearson Education Limited, Edinburgh (2015) (ISBN 978-1-292-09400-7)
- J. Law A Dictionary of Business and Management (6th edition) Oxford University Press (2016) (ISBN 978-0-199-68498-4)
- P.P. Maglio, J. Spohrer A service science perspective on business model innovation Ind. Mark. Manag., 42 (2013), pp. 665–670
- V. Magrath, H. McCormick Marketing design elements of mobile fashion retail apps J. Fash. Mark. Manag., 17 (1) (2013), pp. 115–134
- C. Martin The Third Screen: The Ultimate Guide to Mobile Marketing Nicholas Brealey Publishing, Boston (2015) (ISBN 978-1-85788-623-8)

- D. McCorkle, V. Jurkus, V. Auruskeviciene, J. Reardon The antecedent effects of SMS marketing on consumer intentions *Int. J. Bus. Mark. Decis. Sci.*, 6 (1) (2013), pp. 88–105
- M.E. McCullough, J. Tsang, R.A. Emmons Gratitude in intermediate affective terrain: links of grateful moods to individual differences and daily emotional experience *J. Pers. Soc. Psychol.*, 86 (2) (2004), pp. 295–309
- M. Minsker the road to omni-channel marketing success *CRM Mag.* (2014), pp. 20–24
- Mobile Marketing Association (MMA) An Introduction to Permission-Based Mobile Marketing
Mobile Marketing Association, London (2011)
- G.S. Mort, J. Drennan Mobile digital technology: emerging issues for marketing *J. Database Manag.*, 10 (1) (2002), pp. 9–24
- A. Mukherjee, W.D. Hoyer The effect of novel attributes on product evaluation *J. Consum. Res.*, 28 (13) (2001), pp. 462–473
- E. Naumann, J.D. Jackson, M. Rosenbaum How to implement a customer satisfaction program
Bus. Horiz., 44 (1) (2001), pp. 37–48
- L.V. Ngo, A. O’Cass Innovation and business success: the mediating role of customer participation
J. Bus. Res., 66 (2013), pp. 1134–1142
- O. Oancea, E. Mihaela The influence of the integrated marketing communication on the consumer buying behaviour *Procedia Economics and Finance*, 2nd Global Conference on Business, Economics, Management and Tourism, Vol. 23 (2015), pp. 1446–1450
- L.B. Oh, H.H. Teo Consumer value co creation in a hybrid commerce service-delivery system
Int. J. Electron. Commer., 14 (3) (2010), pp. 35–62
- S. Okazaki *Fundamentals of Mobile Marketing Theories and Practices* Peter Lang Publishing, Inc., New York (2012)
- R. Otis Use These Tools for Smart Digital Marketing *Digital Third Coast* (2013) (Retrieved 20 January 2014)
- A. Palmer, S. Ponsonby The social construction of new marketing paradigms: the influence of personal perspective *J. Mark. Manag.*, 18 (1) (2002), pp. 173–192
- E. Pantano Innovation drivers in retail industry *Int. J. Inf. Manag.*, 34 (2014), pp. 344–350
- E. Pantano, H. Timmermans What is smart for retailing? *Procedia Environ. Sci.*, 22 (2014), pp. 101–107
- R. Pasqua, N. Elkin *Mobile Marketing: An Hour a Day* John Wiley & Sons, Inc., Indianapolis (2013)
- M. Quintana, J.M. Menendez, F. Alvarez, J.P. Lopez Improving retail efficiency through sensing technologies *Pattern Recognition Letters*, Elsevier B. V. (2015)
- L. Rayner, G. Easthope Postmodern consumption and alternative medications *J. Sociol.*, 37 (2) (2001), pp. 157–178
- R. Reed *The SoLoMo Manifesto (Whitepaper edition)* Moment Feed (2011)
- V. Reiners, C. Chao, S. Gorman Permission email marketing and its influence on online shopping
Asia Pac. J. Mark. Logist., 28 (2) (2016), pp. 308–322
- D. Reisinger *Worldwide Smartphone User Base Hits 1 Billion* CNet CBS Interactive, Inc. (2012)

- A. Rese, S. Schreiber, D. Baier Technology acceptance modelling of augmented reality at the point of sale: can surveys be replaced by an analysis of online reviews? *J. Retail. Consum. Serv.*, 21 (5) (2014), pp. 869–876
- G. Ritzer, N. Jurgenson Production, consumption, presumption *J. Consum. Cult.*, 10 (1) (2010), pp. 13–36
- D. Rowles Mobile Marketing Kogan Page Limited, London, UK (2014)
- D. Ryan, C. Jones Understanding Digital Marketing (2nd edition) Kogan Page, London (2012)
- A. Samuely Mobile will account for 49% of Internet advertising by 2020 *Mobile Marketer: The News Leader in Mobile Marketing, Media and Commerce* (2016) (Retrieved 13 June 2016)
- G. Sankaran Mobile marketing strategy – exploring the race for the tiny space
- [Internet], Unaccented Thoughts Available from: <http://gopi.5qadvisors.com/2011/08/24/> (2011) (Accessed 6 May 2012)
- M. Saren Marketing empowerment and exclusion in the information age *Mark. Intell. Plan.*, 29 (2011), pp. 39–48
- M. Saunders, P. Lewis, A. Thornhill *Research Methods for Business Students* (7th edition) Pearson Education Limited, Essex (2015)
- L.G. Schiffman, L.L. Kanuk *Consumer Behavior* (8th International edition) Prentice-Hall (2004)
- P. Segreto *Simplifying Social Media for Optimum Results* International Franchising Association (2010)
- V. Shankar “Mobile marketing: the way forward” (editorial) *J. Interact. Mark.*, 34 (2016) (2016), pp. 1–2 <http://dx.doi.org/10.1016/j.intmar.2016.03.005>
- V. Shankar, M. Kleijnen, S. Ramanathan, R. Rizley, S. Holland, S. Morrissey Mobile shopper marketing: key issues, current insights, and future research avenues *J. Interact. Mark.*, 34 (2016) (2016), pp. 37–48 <http://dx.doi.org/10.1016/j.intmar.2016.03.002>
- T. Shukla Factors affecting Internet marketing campaigns with reference to viral and permission marketing *IUP J. Manag. Res.*, 9 (1) (2010), pp. 26–37
- G. Simmons Marketing to postmodern consumers: introducing the Internet chameleon *Eur. J. Mark.*, 42 (3/4) (2008), pp. 299–306
- P.R. Singh Consumer culture and postmodernism *Postmod. Openings*, 5 (5) (2011), pp. 55–60
- M.R. Solomon *Consumer Behavior: Buying, Having, and Being* (11th edition) Prentice Hall (2015)
- G.A. Steiner, J.F. Steiner *Business, Government, and Society – A Managerial Perspective* (9th edition) McGraw Hill (2000)
- A.T. Stephen The role of digital and social media marketing in consumer behaviour *Elsevier Curr. Opin. Psychol.*, 10 (2016), pp. 17–21
- T. Szymusiak *Prosumer-Prosumption-Prosumerism* Omni Scriptum GmbH and Co. KG, Dusseldorf (2015) (ISBN 978-3-639-89210-9)
- H.M. Taiminen, H. Karjaluoto The usage of digital marketing channels in SMEs *J. Small Bus. Enterp. Dev.*, 22 (4) (2015), pp. 633–651
- J. Thøgersen, F. Ölander Human values and the emergence of a sustainable consumption pattern: a panel study *J. Econ. Psychol.*, 23 (5) (2002), pp. 605–630

- C.J. Thompson A re-inquiry on re-inquiries: a postmodern proposal for a critical-reflexive approach J. Consum. Res., 29 (2002), pp. 142–145
- A. Thrassou “Doing business in the industrialised countries”, chapter 13
- M. Katsioloudes, S. Hadjidakis (Eds.), International Business – A Global Perspective, Butterworth-Heinemann, Oxford (2007)
- A. Thrassou, P.R. Lijo Customer perceptions regarding usage of mobile banking services - the case of Kuwait World J. Bus. Manag., 1 (2007)
- A. Thrassou, D. Vrontis A new consumer relationship model: the marketing communications application J. Promot. Manag., 15 (4) (2009), pp. 499–521 (ISSN: 1049-6491–Taylor & Francis)
- A. Thrassou, D. Vrontis, H. Chebbi, D. Yahiaoui A preliminary strategic marketing framework for new product development J. Transnat. Manag., 17 (1) (2012), pp. 21–44 (ISSN:1547-5778 – Routledge, Taylor and Francis)
- K. Tranter Social media marketing – QR codes [Internet] [UTICAOD.com](http://www.uticaod.com) Available from: <http://www.uticaod.com/blogs/x1965984658/Social-Media-Marketing-QR-Codes/> (2012) (Accessed 27 April 2012)
- E. Turban, D. King, J. Lang Introduction to Electronic Commerce (2nd edition) Pearson Education Inc., New Jersey (2009), pp. 85–91 (559)
- C. Urquhart Meta-synthesis of research on information seeking behaviour Inf. Res., 16 (1) (2011) (paper 455)
- S.L. Vargo, R.F. Lusch Evolving to a new dominant logic for marketing J. Mark., 68 (2004), pp. 1–17
- K. Varnali, A. Toker, C. Yilmaz Mobile Marketing Fundamentals and Strategy (1st edition) McGraw Hill, New York (2011), pp. 58–60
- R. Venkatesan, V. Kumar, N. Ravishanker Multichannel shopping: causes and consequences J. Mark., 71 (2) (2007), pp. 114–132
- P.C. Verhoef, K.N. Lemon, A. Parasuraman, A. Roggeveen, M. Tsiros, L.A. Schlesinger Customer experience creation: determinants, dynamics and management strategies J. Retail., 85 (1) (2009), pp. 31–41
- R. Vize, J. Coughlan, A. Kennedy, F. Ellis-Chadwick “Technology readiness in a B2B online retail context: an examination of antecedents and outcomes”, maximizing buyer-supplier relationships in the digital era Ind. Mark. Manag., 42 (6) (2013), pp. 909–918
- D. Vrontis, A. Thrassou A new conceptual framework for a business-consumer relationship Mark. Intell. Plan., 25 (7) (2007), pp. 789–806
- D. Vrontis, A. Thrassou Adaptation vs. standardisation in international marketing – the country-of-origin effect J. Innov. Mark., 3 (4) (2007)
- D. Vrontis, A. Thrassou, H. Chebbi, D. Yahiaoui Transcending innovativeness towards strategic reflexivity Qual. Mark. Res. Int. J., 15 (4) (2012), pp. 420–437 <http://dx.doi.org/10.1108/13522751211257097>
- J. Williams Social Media: Marketing Strategies for Rapid Growth (2016) (ISBN 978-1-530-42976-9)
- S. Yi, H. Baumgartner Coping with negative emotions in purchase-related situations J. Consum. Psychol., 14 (2004), pp. 3–17
- V. Zeithaml, M.J. Bitner, D. Gremler Services Marketing – Integrating Customer Focus Across the Firm

(4th International edition) McGraw Hill Higher Education (2006)

V. Zwass

Co-creation: towards a taxonomy and an integrated research perspective *Int. J. Electron. Commer.*,
15 (1) (2010), pp. 11–48