CONTEMPORARY MANAGEMENT ACCOUNTING IN THE UK SERVICE SECTOR

ANGELA LORENZ

A thesis submitted to

The University of Gloucestershire

in accordance with the requirements of the degree of

Doctor of Philosophy

in the Business School

October 2015

ABSTRACT

This study demonstrates an original contribution to knowledge by providing a deeper understanding of management accounting practices in the context of service organisations. It explores a number of traditional and contemporary tools and their relationship to service organisations. The study focuses on the extent to which both traditional and contemporary tools are utilised in practice and also the underlying reasons why some tools become embedded in practice and the barriers and enablers of management accounting change in a service sector context.

The study is explanatory in nature and uses a cross sectional survey to provide an understanding of what tools are used by service sector organisations and five in depth case studies to explore the nature of how the tools are used and the factors influencing the diffusion of new tools and the replication of existing tools.

The analysis of the cases is done using Stones (2005) quadripartite framework which allows a sensitising of the data to provide insights into the external and internal structures which govern and are governed by the actions of the accountants.

From the empirical research it was concluded that the management accounting practices of service sector organisations are similar to those of other organisational sectors and mainly rely upon the use of the traditional tools with limited use of the more contemporary tools. The exploration of the tools used in the case studies showed the internal structures in place which allowed the traditional tools to be embedded and replicated over time and also the external structures which when coupled with the internal structures resulted in barriers and enablers of change to the management accounting tools used.

This thesis contributes to knowledge by providing a greater understanding of service sector management accounting and by the development of the strong structuration model to provide valuable insights into management accounting

change and to demonstrate the continued theory practice gap in management accounting.

AUTHORS DECLARATION

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.

Signed …… Date …….

Acknowledgements

I would like to thank my supervisors Tracy Jones and Bob Ryan for their support and all of my academic colleagues who have given me help, advice and a sympathetic ear over the time it has taken to complete this work.

I am grateful for the cooperation of those practitioners who gave their time to complete the survey and also to the accountants who gave their time and insights with respect to the case study work.

I would also like to thank all my friends who have been consistent in their encouragement of my undertaking this PhD and to my partner Tony and children Amber and Sienna for their unwavering belief and the sacrifices of family time they have made.

Table of Contents

List of Tables

Page

List of Figures

Page

Glossary

AA	Activity Analysis
AAT	Association of Accounting Technicians
ABB	Activity Based Budgeting
ABC	Activity Based Costing
ABM	Activity Based Management
ACA	Activity Cost Analysis
ACCA	Association of Chartered Certified Accountants
AICPA	American Institute of Certified Public Accountants
AMT	Advanced Manufacturing Technologies
ANT	Actor Network Theory
ARR	Accounting Rate of Return
BRAG	Business Research and Analysis Group
BSC	Balanced Scorecard
CAD	Computer Aided Design
CAM	Computer Aided Manufacture
CCA	Customer Cost Assessment
CFO	Chief Financial Officer
CGMA	Chartered Global Management Accountant
CIMA	Chartered Institute of Management Accountants
CPA	Customer Profitability Analysis
CPD	Continued Professional Development
CRM	Customer Relationship Management
DCF	Discounted Cash Flow
ERP	Enterprise Resource Planning
EVA	Economic Value Added

FC	Financial Controller
FMS	Flexible Manufacturing Systems
GDP	Gross Domestic Product
ICAEW	Institute of Chartered Accountants of England and Wales
ICWA	Institute of Cost and Works Accountants
IFAC	International Federation of Accountants
IOS	Index of Service
IRR	Internal Rate of Return
JIT	Just in Time
KPI	Key Performance Indicator
LCC	Life-cycle Costing
LSE	London School of Economics
MD	Managing Director
MRP	Materials Requirement Planning
NAA	National Association of Accountants
NIE	New Institutional Economics
NIS	New Institutional Sociology
NPV	Net Present Value
OIE	Old Institutional Economics
PI	Profitability Index
RI	Residual Income
ROCE	Return on Capital Employed
ROI	Return on Investment
SCM	Strategic Cost Management
SMA	Strategic Management Accounting
SMAC	Society of Management Accountants of Canada
SP	Strategic Pricing

TA	Throughput Accounting
TOC	Theory of Constraints
TQM	Total Quality Management
UKSIC	UK Standard Industrial Classification of Economic Activities
VG	Volkswagen Group
WTO	World Trade Organisation
ZBB	Zero Based Budgeting

Chapter One: Introduction

1.1 Research Motivation

Management accounting as a discipline came under attack in the late nineteen eighties when Johnson and Kaplan (1987) claimed that in the USA management accounting information had lost its relevance within organisations and that managers were no longer able to make appropriate management decisions using this information. Their initial work was followed up around the world and was investigated in the UK by Bromwich and Bhimani (1989, 1994).

The argument of Kaplan (1983, 1984, 1985) and Johnson and Kaplan (1987) centered around four key areas:

Firstly that management accounting was driven by financial accounting requirements and resulted in systems which provided data for such a purpose but which did little to aid management decision making within organisations.

Secondly that management accounting failed to acknowledge advances in manufacturing technology and did not adapt to them.

Thirdly that accounting research being conducted did not include study of practice and accounting academics had lost sight of what was happening in real organisations and were not able to forward good practice and innovation to a wider audience.

Finally historically management accounting had been directed over time to develop systems of effective cost management and further developments had been halted.

Bromwich & Bhimani, (1989) found little evidence that management accounting in the UK had experienced the same level of crisis as was claimed by Kaplan for the USA. They purported that management accounting was evolving well on its own in the UK. A number of findings emerged from their work, which indicated that management accountants needed to broaden the use of their skills; that they should focus on development of techniques such as activity costing and target pricing, the use and inclusion of non-financial data and the

recognition of strategic management accounting as an important feature going forward.

Ferrara (1990) agreed many changes have occurred but purported that the subject matter of management accounting had appeared to evolve naturally and by the 1970s organisations were using a comprehensive management accounting toolset which consisted of the techniques that today we would consider traditional both in their use in practice and also through education.

The traditional techniques encompass the following main areas: absorption and marginal costing, incremental and flexible budgeting, standard costing, capital budgeting and profit-based performance measures as per classifications used by a variety of academics over time such as Dugdale (1994), Chenhall & Langfield-Smith (1998), Horngren (2004), Waldron (2007). This view is supported in the reviews that have taken place of management accounting education such as Brewer (2000) and Horngren (2004).

Granlund and Lukka (1998:156) suggest that there are a "number of factors which are responsible for shaping management accounting practice including production and information technology, competition, organisational structure and processes, Inter-organisational relationships, strategy, education, administrative and social controls, legislation, regulation, financial markets, and national and organisational culture."

According to Dugdale, Jones & Green (2006) the impetus for management accounting change has been driven largely by improvements in technology which have had the effect of widening the competitive environment, allowing organisations to utilise better communication tools and rationalise their processes and systems.

The advancements and changes in the economic environment that have been documented by academics over time (Bromwich & Bhimani, 1989; Ferrera, 1990) have been particularly aligned with manufacturing industries.

Bromwich and Bhimani (1989) identified a number of technological changes, which created new production systems and had subsequent implications for management accountants. These included Just-in-Time production, flexible

manufacturing systems and computer aided design and manufacture. They reviewed the research that was then being conducted in management accounting across a variety of manufacturing based organisations. They found in some cases the use of advanced manufacturing technologies resulted in traditional management accounting techniques failing to aid the organisation. They also concluded that wholesale change of management accounting was not the solution in the UK due to the unique nature of the UK economy and UK organisations. As a result of the above the subsequent empirical research was predominately carried out in manufacturing organisations.

During the nineteen nineties new management accounting theories and practices appeared regularly, Bromwich and Bhimani (1994) documented a number of these including cost management techniques such as Activity Based Costing, Just in Time systems and Total Quality Management as well as the soon to become very topical Strategic Management Accounting. Chenhall and Langfield-Smith (1998:1) identified that traditional management accounting practices focus internally and are financially orientated, whilst "contemporary management accounting techniques combine both financial and non-financial information and have a more strategic focus".

The range of tools considered contemporary has evolved since the work of Bromwich and Bhimani in 1989, the tools, which consistently appear in lists, research material and textbooks encompass the following key areas, which the author has chosen to aggregate into three areas for ease of use:

Extensions to existing practice	Better budgeting and beyond budgeting Throughput accounting
New techniques	Activity Based Costing (ABC) Activity Based Management (ABM) Kaizen Costing
Strategic Management Accounting	Benchmarking Multidimensional performance

	measures Lifecycle costing Strategic Cost Management Target costing Attribute costing Value chain cost analysis Quality costing Customer Profitability Analysis (CPA)

Thus, it followed that accounting research sought to ascertain the value and usage of these contemporary approaches of management accounting in organisations. The work of Bright et al, 1992, Drury et al, 1993, Innes and Mitchell, 1995 and Dugdale et al 2006 all document the value of these techniques in a manufacturing environment in the UK.

Bromwich and Bhimani (1994:3) themselves remark that their report is focused on manufacturing "reflecting that the bulk of the literature and documented experience address this area" and they also go on to reflect that the techniques would be equally of value in service organisations.

As time has moved forward the research into management accounting change and development has continued but service organisations are continually overlooked in respect to this broad based research.

Lowry identified in his 1990 paper that there was a disparity between the economic importance of the service sector and the amount of management accounting research being focused on it.

One might argue that there is little difference between the needs of service organisations and manufacturing ones and that management accounting tools can be equally applied to both. Lowry (1990) identifies that there are significant differences between service organisations and manufacturing organisations in several key areas.

The first area he identifies is organisation size, statistics show that the majority of service organisations are smaller and other academics suggest that the accounting requirements of small firms differ from those of larger firms (Reid & Smith, 2002).

Lowry (1990) goes on to comment on the organisational structure of service organisations highlighting from the work conducted by Mills in 1986 a difference in spans of control and number of management levels between service and manufacturing organisations. It was also observed that increasing the size of the firm did not appear to change either the span of control or number of management levels in service organisations. He concluded that "service firms are characteristically small enterprises with short spans of control and chains of command" (Lowry, 1990:172). These are also features identified by Brignall and Ballantine in their 1996 research work.

Sheridan (1996) highlights other key characteristics of service organisations that affect the way management accounting may be applied including the lack of stock, which as Sheridan points out ought to make costing more straightforward. Other characteristics make it more difficult to apply management accounting techniques such as the simultaneity and perishability of the service provided. Lowry (1990) adds the lack of standardised output as also influencing services ability to utilise much of the quantitative tools that have been introduced.

The changes outlined above in the economic environment have focused on their impact on manufacturing organisation. However, Lowry (1993) highlights the effect advances in technology have had on service firms too in terms of broadening demand for services and increasing the productivity and efficiency of service firms, particularly professional service firms by reducing the cost of formal communication and thus achieving a technology economy of scale.

Lowry concluded in his 1990 paper that either management accounting has little to offer the service firm or that changes need to be made in research and management accounting tools to enhance their use to service organisations. If service organisations as Lowry (1990) suggests are externally focused and linked very closely to changes in their business environment, the contemporary

techniques aligned with strategic management accounting ought to be utilised in service organisations.

A number of researchers have conducted management accounting research in service industries following Lowry's paper. All of the work has followed one of two paths either it is sector wide and focuses on a single issue or focuses on a single service sector and a single issue.

Fitzgerald et al (1991) is well quoted in studies related to service industries. Modell (1996) recognised Fitzgerald et al (1991) as the most thorough study of service industry performance measurement to date, and identified the Fitzgerald study as still the most quoted study. However the Fitzgerald et al study is focused on a specific issue - performance measurement specifically and was based on 11 case studies. Further service sector studies in the area of performance measurement have subsequently been carried out. Brignall et al (1992) focused specifically on the link between performance measurement and competitive strategies in services and was based on three case studies. A later paper by Brignall & Ballantine (1996) draws on this earlier research work and extends the normative model of performance measurement in a service context. Within this paper they recognise that much of the literature at that point ignored the significance of the service sector.

In 1996 Modell identified research into service industry management accounting was in its infancy, and textbooks equally paid limited attention to services. He also asserted that much of service research tended to be orientated around the difference between services and goods which did nothing to aid the managers of service organisations with planning and control. Modell's study looks at the specific structural and behavioural perspectives of management accounting and control in service environments. Whilst his literature review and theoretical discussion focuses on 'for-profit' service environments, the empirical data relates to a single case of a public sector dental practice. He recognised the need for further studies that include a larger number of case studies to further research in this area.

Sheridans (1996) work focused specifically on costing in the service sector and made comparisons to manufacturing.

Both the study by Nielsen, Bukh, & Mols (2000), and the review of literature by Hussain & Gunasekaran (2002), centre on financial services. The former study focuses narrowly on customer-orientated management accounting in the context of financial services in a Danish context. Hussain & Gunasekaran (2002a) acknowledge the comparative lack of research in services, given the economic importance of the service sector. Although their review focuses on banks and financial institutions they theorize as to the applicability of some findings to other service industries such as airlines, transportation, hospitality and healthcare. Hussain & Gunasekaran still raised the inadequacies of 'traditional' management accounting systems whilst conducting this research.

Grando et al (2006), again consider performance measurement but this time drawing comparisons between service and manufacturing sectors. Their work focuses on the operational performance of organisations rather than the managerial or strategic nature of some of the preceding work.

The papers of Perren & Grant (2000) and Perren, Partridge & Berry (2000) focus on four different service industries (1 case study in each industry); they concentrate on micro-entrepreneur based businesses exclusively. The research is based on the specific issues of SMEs and 'owner managed' businesses, so again it is questionable whether these results are generalizable across larger service organisations.

The work of Harris & Brander Brown (1998) and that of Atkinson & Jones (2008) identifies much research has taken places over the years specifically focused on the hospitality industry. As an example Ahrens & Chapman (2007:1) longitudinal study of a UK restaurant chain (singular case study) utilised "*a distinctive practice theory approach to considering the role of management accounting in the constitution of organisations".* This builds upon their earlier paper Ahrens & Chapman (2002).

Even when we reach the work of Laine et al in 2012 the assertion remains the same that we know little about the role of Management Accounting in a service context. Laine et al in their literature review come to the same conclusions as this author in terms of the work conducted to date though Laine et al focus their work on the growth of servitisation rather than pure service.

Analysis of the research conducted to date therefore identifies a need for broader research which is able to draw empirical evidence across a range of service industries in order to fully explore industry comparisons.

1.2 Aim of the thesis

This work provides an original contribution to knowledge by focusing on a deeper understanding of management accounting practice in the context of service industries. It seeks to explore a number of traditional and contemporary management accounting tools and their relationship to service industries.

The research will consider if there is anything unique and homogeneous related to service industries collectively, or any industry specific traits that influence management accounting practice. Within service industries there are 'pure' services offered to customers and service related products that combine a product element with service provision to customers. The research will consider whether different management accounting techniques are used in 'pure service' situations, as opposed product elements of services offered.

Through the exploration of the state of management accounting practice in service organisations, it will also be possible to explore the reasons for adoption of management accounting practices and the barriers that service organisations face in their adoption and use of management accounting tools.

Thus, in the context of service industries, the nature of the 'theory/practice gap' in management accounting will be explored and can be compared to existing empirical evidence.

Traditionally, management accounting designed for manufacturing industries has been used or adapted for use in service industries. Through this exploration of the 'state-of-the-art' of service industries management accounting practice lessons can be learned which could lead to theory development. It may also lead to identify practice, which could be of use to the manufacturing sector.

In gaining a deeper understanding of service industry management accounting practice it is anticipated that there will be new insights into the nature of management accounting practice. Such insight can feed into the generic field of management accounting, both in the context of theory and practice development.

1.3 Research Questions and Objectives

The research questions are as follows:

RQ1 - To what extent are traditional and contemporary management accounting tools being applied within service sector organisations?

RQ2 - Do the management accounting tools used in service sector organisations match the tools as applied in manufacturing organisations?

RQ3 - How do management accounting tools become embedded in service sector organisations?

RQ4 - What are the reasons for change/lack of change in management accounting tools used in service sector organisations?

In line with the aim and research questions detailed above the objectives of this research are to:

- Analyse the development of management accounting practices over time;

- Establish the scale to which accepted traditional and contemporary management accounting tools are utilised in UK service industries;

- Evaluate the degree to which the findings are comparable with the existing literature and to other empirical studies;

- Evaluate the reasons why management accounting tools become established in service organisations;

- Critically review the factors that influence the inertia and reproduction of existing tools and the change and diffusion of new tools in service sector organisations;

1.4 Thesis Structure

In order to answer the research questions and achieve the objectives the remainder of the work will follow the following structure:

Chapter two will provide a comprehensive review of the literature starting with a review of management accounting developments over time in order to better understand the origins of management accounting tools and the degree to which they have been developed for use in specific sectors or situations.

The chapter will continue with a thorough evaluation of the tools defined for the study as traditional, considering their evolution over time and evaluating the empirical evidence of their use in a practical context in a variety of organisational contexts but paying particular attention to service organisations.

A review will be made of the literature surrounding the re-evaluation of management accounting in the 1980's and the influence of service organisations on the ensuing changes.

A thorough evaluation will be made of the tools defined by the study as contemporary considering their purpose and development together with the

empirical evidence supporting their usage in a variety of organisational contexts but particularly service organisations.

An empirical review will be made of the existing literature to determine the themes present across the literature in order to use it comparatively with the survey evidence in chapter six.

Additionally, a review will be made on the existing literature relating to management accounting change and diffusion of management accounting practices and the extent to which the theory practice gap is still evident in management accounting.

The first objective to analyse the development of management accounting practice over time, will be achieved on the completion of this chapter. This chapter will also have set the contextual work for objective two by reviewing the tools to be considered and the degree to which previous work has addressed their usage in a service context.

Chapter three will provide an industry context to illustrate the strength and importance of the service sector to the UK economy.

It will provide a review of the nature of service organisations evaluating the factors that make the service sector unique, and which will potentially influence the choice of management accounting tools used. Thus, providing a background for reviewing the factors, which influence the choice of management accounting tools in service industries.

Chapter four will consider the methodology and social theory that the work will follow and be guided by in order to give a lens for reviewing the empirical evidence and achieve the research aims and objectives.

Chapter five will consider the variety of methods of data collection to be used and evaluate them in order to satisfy the research problems and to achieve the objectives set.

Chapters six and seven will consider the results achieved from the methods used and evaluate the results in line with objectives two, three, four and five together with their ability to answer the research questions.

Chapter eight will provide an overall conclusion to the research summarising the key issues arising both from the review of the literature and the results of the study undertaken in relation to the research objectives of the thesis. It will consider the limitations of this thesis and will consider additional research that could be undertaken to further the work in this area.

Chapter Two: Literature review

2.1 Introduction

This chapter provides a context for the development of management accounting tools over time and their usage in organisations. It is split into five sections; the first section charts the historic development of management accounting from a variety of different standpoints including those of the UK and USA and also from different social perspectives. The second section provides an overview of those tools which have been classed as traditional for the purposes of this study including appropriate empirical evidence of their use in contemporary organisations. The third section provides the context for the development from the traditional tools to the contemporary tools by examining the 'crisis' in management accounting during the 1980's. The fourth section considers the development of the tools which are considered contemporary for the purpose of this study and considers the empirical evidence to support their use in organisations. The final section brings together the range of empirical evidence to confirm the gap in the literature pertaining to service sector organisations and also identifies the other key research areas of the thesis in terms of management accounting change and the theory practice gap evident from the literature and empirical evidence.

2.2 Historic development of Management Accounting

The well held view of the development of cost accounting was developed by Edwards, (1937) and Solomons (1952) when reviewing the early texts which focused on recording processes, cost per unit calculations and book keeping records for stock and raw materials. The main issues of the texts at the time were considered to be on the financial reporting aspect of the accounting work. Their conclusions were that cost accounting was not recognised up to the 1870s when a leap forward appears to be made in costing with the transformation from cost recording to cost control.

Boyns and Edwards (1997) refute this and found evidence of earlier practice, they postulate that the reason the practices remained hidden is that cost records were less likely to be kept than financial records and that cost accounting became separated from the financial accounting requirements.

Those investigating management practices such as Urwick & Brech (1948) and Pollard (1968), evidence that cost accounting practice influenced the development of management techniques as far back as the early nineteenth century. It should be noted though that whilst evidence of practical use can be found it is well documented that there was a lack of cost accounting literature to support any methods being used (Urwick & Brech, 1948, Pollard , 1968). The first British text on costing in the opinion of Boyns, Matthews & Edwards, (2008) was published in 1887 (Garcke and Fells Factory Accounting).

Pollard, (1968), during his study of management, noted four key developments in accounting during the industrial revolution period in the UK. The use of regular returns and the ability to use information for liquidity and prevention of fraud he found of little importance, compared to the evidence he found of the use of accounting techniques to aid management decisions and the ability to determine total costs and profit.

Boyns & Edwards (1997) found evidence through their research of cost accounting that, what we consider to be the main traditional management accounting techniques were present in firms much earlier than some academics would have us believe (Ashton, Hopper & Scapens, 1995, Chandler, 1977, Johnson & Kaplan, 1987). The use of cost and management accounting techniques can be traced back as far as 1690 at the Staverly iron works (Boyns & Edwards, 1997).

In particular, Boyns & Edwards (1997) found evidence in their study of Coal, Iron and Steel industries that cost and financial accounting records were kept in a single book keeping system showing the apportionment of overheads to cost centres and the use of transfer pricing. They also found evidence of routine reporting over short time periods consistent with the need to produce timely information for management purposes. The apportionment of overheads was

given due attention in many of the records and there was evidence of performance measures being used in relation output, changes in total cost were monitored over periods and comparisons were made with other organisations. Finally, they found detailed evidence of the use of transfer pricing in particular the use of a market based transfer price and the debate regarding the use of market or cost based transfer prices.

Fleischman & Macve (2002) Provide evidence from coal mines at the turn of the 19th Century which demonstrate the use of a wide variety of cost and management practices which continue to be used today and reinforces the evidence supplied by Boyns & Edwards (1997).

Wardell & Weisenfeld (1991) chart the development of British firms and the ways that they changed from the 1700's from small craft shops to large organisations. They remark that even up to the 1960's UK organisations did not have the hierarchy and central management that was evident in US organisations and which shaped management accounting practices. They also purport that whilst some British businesses such as Wedgewood and the Soho Engineering Foundry were utilising cost accounting systems, the systems were not widely practiced.

Ahmed and Scapens (2003) use an institutionalist perspective to examine the movement in cost accounting from the late 19th century in Britain. The movement to the use of uniform cost systems was brought about by the economic practices of firms which achieved dominance in their markets by price-cutting and price fixing and not by cost reduction and efficiency. In this respect Ahmed & Scapens (2003) liken many sectors of British industry to those in the US at the time. In order to counteract these practices a proposed scheme of uniform costing was proposed.

The system of uniform costing was introduced in the printing industry and followed the costing method that had been introduced by American printers. The system specified and defined the key elements of a system including nature of cost, apportionment of overheads and profit. Solomons (1950)

reported that between 1913 and 1950 there were 26 systems of uniform costing in Britain.

The uniform costing system endured for so long because the government used it during and after the First World War (Loft, 1988). The government introduced procedures for checking and analysing costs and laid down specified accounting procedures, which in turn increased the involvement of the accounting profession and extended their practices (Stacey, 1954).

It was post the First World War in 1919 that the Institute of Cost and Work Accountants (ICWA) was formed, Loft (1990) agreed with Staceys view that there was the need for professionalisation of costing expertise laying the foundations for the development of the institute. The founders of the ICWA had the aim to make cost accounting fully professional through education and examination, and by making costing a more scientific discipline (Bromwich & Bhimani, 2010).

At the same time as the ICWA was formed a lack of progress in cost accounting was already being observed in American industry. Bromwich and Bhimani (2010), cite Jordan and Harris 1920 text observing:

“Hardly any other feature of industrial procedure has been so necessary, yet so slow in developing as cost accounting – so rich in possibilities of usefulness for management of business, yet so widely considered for many years as a necessary doubtful evil.” (Jordan & Harris, 1920, p. iii; cited by Bromwich & Bhimani, 2010:4)

The Second World War perpetuated the use of the uniform systems but afterwards manufacturing companies became dissatisfied with the system (Pears, 1952) and given developments in different industries “the rules which were introduced to control monopolistic practices had become as anti-competitive” Ahmed & Scapens (2003:186). Even so the practices were able to provide a framework for costing systems going forward.

Other traditional techniques did not appear widely used in the UK until after the Second World War, Wardell and Weisenfeld (1991), attribute this to the strength of the workforce in ensuring production methods were traditional local practices, and the devolution of ownership from management in the larger organisations, meaning that the shareholders were not interested in the operations on the shop floor. Any attempt to control the workforce by the use of standards was not popular.

In 1998 the International Federation of Accountants (IFAC) summarised the development of management accounting through four stages (see figure 2.1 below for illustration) starting with the period pre 1950, where they describe it as a "technical" activity with a focus on product costs. This approach resulted in an orientation towards manufacturing and internal data. During this time costing systems were developed albeit slowly in the UK and according to Ashton et al (1995) continue to be the main form of management control in organisations.

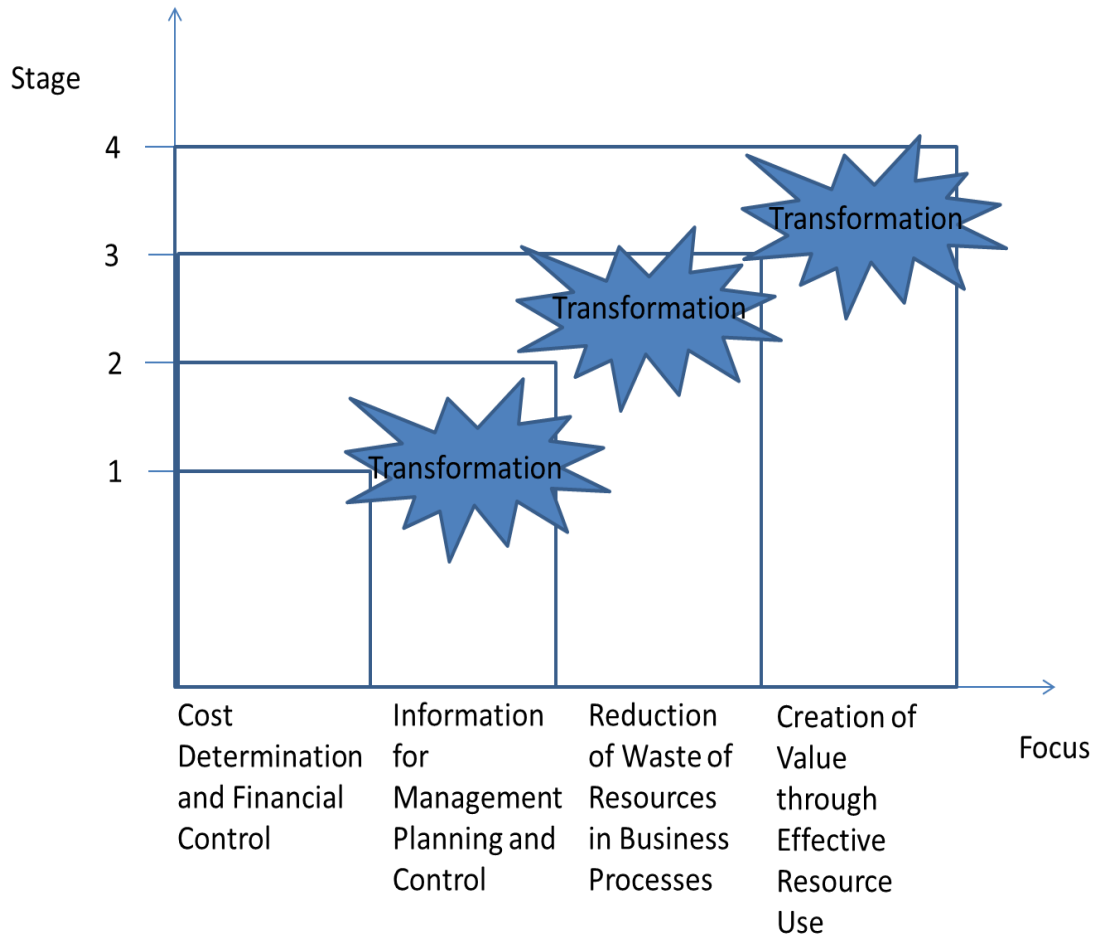
Stage two of IFACs development of management accounting took place in the 1950s and 60s with more information being produced for management control, though the continued emphasis on product costing, led to much of the controls being reactive, and having little influence on management decision making in organisations, (Ashton et al, 1995).

Stage three was reached by the mid 1980's fuelled by major world events which took place including the world recession following the 1973 oil price shock and increasing global competition in the early 1980's (Abdel-Kader & Luther, 2006). The increase in competition brought with it an increase in the use of technology streamlining the manufacturing processes and also enhancing information processing within organisations (Ashton et al 1995).

It was at this time that there was a decline in the size of the UK's manufacturing industry and an increase in the service sectors particularly in leisure and tourism and conventional cost accounting was found wanting, (Ashton et al, 1995).

The final stage of IFAC's model which was in place by 1995 charted the continued influence of technology and flatter organisations structures and shifts the management accountants focus towards creating value through proper use of resources. (Abdel-Kader & Luther, 2006)

Figure 2.1: Evolution of Management Accounting



Source: IFAC (1998) (cited by Abdel-Kader and Luther, 2006:4)

Professional bodies have taken a role in shaping management accounting practice over time. CIMA (Chartered Institute of Management Accountants formally the ICWA) in particular have been at the forefront of supporting research and introducing newer management accounting tools to their syllabus.

One need only look at the CIMA published work of Bromwich and Bhimani (1989, 1994, 2010) which was originally commissioned to present the UK perspective on the assertions of Johnson and Kaplan (1987) and numerous other works designed to analyse that change in management accounting practices such as Dugdale (1994), Dugdale et al (2006) Scapens et al (1996) and Ross and Kovachev (2009).

More recently (2011) CIMA have created a joint venture with the American Institute of Certified Public Accountants (AICPA) to enhance the profile of management accounting and aid its development across the world by creating a new designation of Chartered Global Management Accountant (CGMA) for CPA members with qualifying management accounting experience and fellow and associate members of CIMA (CIMA, 2011).

In 2014 CIMA and AICPA launched their Global Management Accounting principles which are designed to guide best practice in Management Accounting.

There are four principles: Influence; Relevance; Value and Trust which they intend to be universally applicable to all organisations irrespective of sector and size. The principles are applied across 14 key activities of the management accounting function. See Appendix 1 for the table of core practice areas of the management accounting function. (CIMA, 2014)

The Joint venture has also produced a book regarding the top 20 essential tools for management accountants detailing the contemporary tools outlined by this thesis, it's aim is to "helps management accountants and business managers to identify the right tools from a crowded field and to obtain the full value from such tools" (CIMA, 2013:3).

2.3 Traditional Tools of Management Accounting

The basic premise of management accounting is that it should provide information to support managers in a number of key ways:

Planning – ensuring that the short, medium and long-term strategies of the business are adequately resourced.

Decision making – Gathering and evaluating information, to make effective short, and long-term decisions, in relation to the efficiency and effectiveness of the organisation.

Control – Allow managers to see that their plans have been adhered to and that the business is controlling costs and systems and employees are performing efficiently.

From the review of the historical data it can be seen that in order to support organisations and their managers a number of techniques were used from the late 1800's. These techniques which have their origin in the industrial age are classed as traditional for the purpose of this study.

This section will give an overview of these techniques highlighting their perceived use in an organisation.

2.3.1 Budgeting

The use of budgets can be traced back over 100 years (Boyns, 1998; Jones, Attkinson & Lorenz, 2012) with a focus on aiding planning. Boyns (1998) charts the development and use of budgets showing their use in the UK in central government as far back as the 1800's. Boyns recognises the work of Solomons (1952) which shows that by the second half of the 20th century budgeting began to serve a number of functions within the UK suggesting it would "aid systematic planning, or it may aid the delegation of authority, by fixing limits up to which subordinates may be allowed to spend." (Solomons,1952:47). Solomons (1952) also observed firms integrating budgets with their cost records to exercise control over expenditure.

The definition of a budget has evolved over time and most academics now agree on a relatively standard definition which summarises a budget as a quantifiable plan (Bhimani et al, 2012; Drury, 2012; Collier, 2012).
The budgets prepared in organisations will generally stem from the need to produce a master budget comprising a budgeted income statement, budgeted statement of financial position, and budgeted cash-flow statement. Feeding the master budget will be a number of other financial and non-financial budgets which will contain detail of the organisations operational and resource needs for the forthcoming period (Bhimani et al, 2012).

The main benefits of budgeting systems and their longevity stem from their ability to satisfy a number of functions within organisations. Key academic textbooks and researchers (Drury, 2012, Jones et al, 2012, Hilton 2001), agree that used correctly budgets can serve a number of purposes within an organisation, not just the ability to plan but also to provide a means for effective control, encouraging cross organisational communication and co-ordination, provide a tool for motivation and allow the evaluation of divisional or managerial performance.

Increasingly over time however academics have begun to report that what we might call traditional budgeting has lost its relevance (Hope & Fraser, 1999; Max, 2005; Pilkington & Growther, 2007; Banham, 2012). Most noticeably has been the “beyond budgeting” movement started by Hope and Fraser in the late nineteen nineties and further developed by their beyond budgeting round table which levels the following reasons for replacing the traditional budgeting process.

“1. Budgeting prevents rapid response to unpredictable event
2. Budgeting is too detailed and expensive
3. Budgeting is out of date within a few months
4. Budgeting is out of kilter with the competitive environment
5. Budgeting is divorced from strategy
6. Budgeting stifles innovation
7. Budgeting protects non-value-adding costs

8. Budgeting reinforces command and control
9. Budgeting demotivates people
10. Budgeting encourages unethical behaviour."

Taken from the Beyond Budgeting Round Table website.

Numerous empirical studies have been undertaken since Hope and Fraser first raised their concerns, Ekholm & Wallin (2000) conducted a survey of 650 Swedish organisations finding overwhelming support for changing budgeting process (60.7% of respondents). Dijkman's 2008 work on Dutch listed companies however showed 70.7% of respondents to be happy with their budgeting process. Libby & Lindsey's 2010 survey of 346 North American organisations showed 85% of organisations continuing to use traditional budgeting but just over half of those were planning to make changes to their systems.

Surveys of general management accounting practice such as Ross & Kovachev (2009) based predominantly on the UK and Clinton & Whites 2012 USA study both show continued support for the use of traditional operational budgets.

2.3.2 Budgetary Control

The development of budgetary control can be considered separately from budgeting as it is possible to create budgets without having a system of budgetary control, the budget may merely act as permission to spend whilst the control relies on feedback from the budgets, (Quail, 1997).

Budgetary control is a management tool which seeks to devolve responsibility down the chain to lower levels whilst retaining control at the top. It involves manipulating the budgetary data constructed for the whole business on a volume basis to match actual data and then use this information for comparison which yields information about cost and revenue management, (Boyns, 1998). The ICWA in 1950 supported the view that budgetary control could be exercised in a variety of organisations and Quail (1997) suggests that whilst budgetary control can be exercised in small businesses, it becomes more and more

essential as organisation sizes increase due to the increase in production pace and volume. Quail (1997) supports this with the case of General Motors purporting that without budgetary control the organisation may well have collapsed. This is, as Sloan (1986) points out, due to the fact that budgetary control paved the way for decentralisation and divisionalisation in large organisations which would have been risky without it.

A number of academics (Boyns, 1998; Scapens, 1991; Quail, 1997) reflect that the development of budgetary control (and standard costing) was slower in the UK than in the USA. Scapens (1991) reflects at there was a lull in the reported use of budgetary control in the 1900's up until the end of the Second World War a view upheld by Quail (1997) on his reflection of the interwar period. However Willsmore (1932 – reproduced in 1949 as cited by Boyns, 1998) documents the widespread use of budgetary control within his own organisation to plan operations with a focus on the future and surmised as to its use in a number of organisations at that time. He further supported his claim in his work of 1949 in which he suggested that budgetary control was fully established in the UK as a management control tool, (Boyns, 1998).

More current research (Dijkman, 2008; Ross & Kovachev (2009); Libby & Lindsey, 2010; Clinton & White, 2012) continues to suggest the widespread use of budgetary control in a range of organisations. Notably Libby and Lindsey's research showed that 80% of their Canadian respondents and 77% of their US respondents used budgetary control and of those using budgetary control 94% expressed the view that they would continue to use it.

2.3.3 Standard Costing

Standard costing can be traced back to the industrial revolution in the UK and the introduction of scientific management and time and motion studies in the USA (Fleischman & Tyson, 1998). Standard costing and budgetary control are often linked together, Boyns (1998: 265) states:

“The link between them is formed by the fact that they share five common principles:

1 The establishment of a predetermined standard or target of performance;
2 The measurement of actual performance;
3 The comparison of actual performance, in detail and in total, with the predetermined standard;
4 The disclosure of variances between actual and standard performance and the reasons for these variances; and
5 The suggestion of corrective action where examination of the variances indicates that this is necessary.”

At the time of the industrial revolution the use of standards was rudimentary but quite clearly the resulting information was useful for decision-making purposes in a number of organisations (Fleischman & Tyson, 1998). Boyns, Matthews & Edwards (2004), also clearly show evidence of standard costing in the British chemical industry in the early 20th century.

Debate ensued relating to the development of standard costing in the UK and the USA with some academics purporting the superiority of US firms in the use of this technique (Parker, 1969; Armstrong, 1987 and Wardell and Weisenfeld, 1991), however historical work conducted by Fleischman, Boyns and Tyson in 2008 reveals that this is not necessarily the case and whilst it is less recorded there is clear evidence of standard costing being used in a variety of British organisations right through the 20th century.

Standard costing’s key uses again stem from the ability to plan but at a unit level within the organisation and utilise the information created to conduct variance analysis designed to exercise operational control within the organisation. A standard is created by estimation of the material, labour and overhead costs required to provide one unit of a product or service.

The creation of a standard cost can serve a number of purposes for an organisation including the ability to provide a basis for product cost and selling

prices and the ability to compare standard costs and usage at actual output levels with actual costs to allow organisational operational control (Bowhill & Lee, 2002). Additionally since this data may be used as part of a rewards system there is a potential to influence individual and team motivation and impact on performance management. There is additional documented evidence of the use of standard costing in decision making and performance evaluation (Badem et al, 2013).

There has been a growing academic debate as to the usefulness of standard costing as a tool which started in the mid 1990's and has continued into the 21st century with academics such as Johnson & Kaplan, 1987; Monden & Lee, 1993; Ferrara, 1995; Lucas, 1997; Fleischman & Tyson, 1998; Hilton, 2001 and Gupta & Gunasekaran, 2005, suggesting it is no longer suitable. Many of the arguments revolve around specific changes in organisations which have impacted upon production processes such as Advanced Manufacturing Technologies, shorter product life cycles and the reduction of labour as a proportion of total product costs, (Badem et al, 2013).

However despite these claims there is a large body of evidence which suggests that standard costing continues to be a staple tool in the management accountants' role. The extensive use of standard costing can be seen in developed and developing countries and in different industry types from various academic surveys over time such as Puxty & Lyall, (1990), Joshi, (2001) and Marie et al, (2010). Specific country studies such as Ghosh & Chen, (1996) showed an increasing usage in the techniques over time amongst firms in Singapore, whilst Sulaiman et al (2008) found 70% of Malaysian firms and 76% of Japanese companies using standard costing.

In the UK the reported usage ranges from more than 90% usage in Lyall & Grahams 1993 study to 76% in Guilding et al's 1998 study and Ross and Kovachevs 2009 study, continues to support the popularity showing over 70% of organisations surveyed using variance analysis.

2.3.4 Absorption Costing

The use of absorption costing can be traced back through the reflection on the historical development of management accounting in the UK to the research of Boyns and Edwards (1997), where they identified the use of costing systems and the apportionment of overheads to cost centres as far back as 1690. Gupta and Gunasekaran (2005) in their review of cost measures corroborate the view of Ferrara (1995) with their evolution of cost measures showing a focus on average and then manufacturing cost using full/absorption costing for the reporting of costs up to the 1940's when other methods of costing began to be explored and used as organisations started to evolve past those exclusively tied to uniform product production in stable production runs.

Berland, Boyns and Zimnovitch (2002) chart the influence of the accounting professions on costing development and dissemination. They purport that accounting professionals had little to do with costing until the arrival of the ICWA in 1919 and that debate revolved around the best way to complete double entry book keeping with respect to cost accounts rather than the technique of absorbing overheads.

Dugdale and Jones (2003) document the recording of absorption costing and its definition by academics from the work of Garcke and Fell (1887, cited by Boyns, Matthews & Edwards, (2004)) as the first record of cost accounting, to Glover and Williams (1928) who write about prime cost plus works on cost in deriving the total cost and on to the work of Wheldon (1937) and Carter (1938).

They (Dugdale and Jones) state that "By the beginning of the 1950s Bigg felt confident enough to begin his text with the definitive claim that:

The prime function of a system of Cost Accounts is the provision of such analyses and classifications of expenditure as will enable the total cost of any particular unit of production to be ascertained with a reasonable degree of accuracy.

(Bigg, 1950:1)" (as cited by Dugdale and Jones 2003:309).

Through what has been ascertained of the uniform system of accounting (Solomons, 1950) and government influence, the use of absorption costing in practice flourished alongside the academic work (Loft, 1990; Ahmed and Scapens, 2003).

The definition of what a costing system is and what absorption costing is as a system for cost collection has not changed over the years and accounting practice has created standards for what should be included in financial statements in respect of cost information (I.E. SSAP 9, Abdel-Kader and Luther, 2006). As such, the established methodology of identifying the costs of material, labour and overheads, and the use of labour as the means for absorbing overheads has endured over time as a means of giving information for decision making and control, (Lucas, 2000; Jones et al, 2012).

Research in the 1960's and 70's (Staubus et al, 1963; Fekrat, 1972) was very clear as to the reasons for the use of absorption costing including the premise that fixed overheads have to be accounted for and also that for a manufacturing business including the fixed cost in inventory meant that it was not realised until the stock was sold.

The first criticisms of absorption costing started to appear in the 1950's with a growing interest which started in the USA towards 'direct costing', (Amstrong 1975). Up until this point there was little innovation in products or production processes and production technology was fairly simple. As such managers were primarily concerned with internal matters such as production capacity since the products could be sold easily with minimum competition, (Abdel-Kader and Luther, 2006) and the use of cost information for management decision-making was minimal (Ashton et al, 1995).

The main concerns with absorption costing at the time stemmed from the methods used to recover overheads and the need to recover overheads at all (which started the debate as to the use of direct or marginal costing as an alternative) (Abdel-Kader and Luther, 2008). In more recent years as products and process have become more complex and information processing costs

have reduced significantly academics such as Johnson and Kaplan (1987) began to question its value in light of such developments (Lucas, 2000).

Cooper and Kaplan (1988a) put forward that costs had become distorted in the late 80's as a result of continuing to focus on the use of volume based overhead drivers, such as labour to absorb overheads which have increasingly no link to labour. They hold a view that accurate product information is a key factor in organisational competitive success.

Lucas (2000) suggested that in spite of the criticisms levelled at absorption costing it continues to endure and he offers up a number of reasons why this might be the case.

From a sociological perspective one must view current practices from more than a functionalist and technical perspective (Laughlin and Lowe, 1990), but in the context of their wider organisational and social foundations it is unlikely that absorption costing will be abandoned just because of technical deficiencies (Lucas 2000).

Other academics have defended the use of absorption costing on the grounds that there are advantages which outweigh the disadvantages and that the disadvantages can be contested. Kaplan et al (1990), defended the notion that using production volumes as a basis for allocating overheads is sound as there was a strong correlation between overheads and production volume even if there was a lack of a cause and effect relationship and the product cost would not become distorted.

Empirical evidence collected over time also showed the continued use of this tool, Abdel-Kader and Luther, showed organisations still viewed absorption costing as important in their 2008 survey, 80% of respondents used absorption costing in Chenhall and Langfield-Smiths 1998 Australian research, Clinton and Whites 2012 research in the US shows continued extensive use of the tool as does Ross and Kovachev's 2009 work based on CIMA members across the world.

2.3.5 Marginal Costing

Specific techniques for decision-making have evolved over time. Those for short-term decision-making, revolve around the use of marginal or direct costing, and the analysis of the way in which costs behave in relation to activity. A number of associated techniques evolved to help with specific aspects of short-term decision making such as scarce resource analysis, CVP analysis, make or buy decisions etc.

The interest in marginal or direct costing began in earnest when the main criticisms of the then traditional costing systems and methods of absorption were coming under attack (Dugdale and Jones, 2003). They (Dugdale and Jones, 2003) together with Anthony (1989), highlight an article by Harris in 1936 titled "What did we earn last month" as being the start of a debate between Absorption and Marginal costing which continues to rage today. Following Harris' article research in the US showed the use of direct costing techniques as far back as the 1920's and in the US the popularity of direct costing perpetuated into the 1960's with both practitioners and academics engaged. Practitioners were primarily enamoured of the ability to use direct costing approaches whilst academics were torn between the period nature of fixed costs and the need to account for them in inventory (Neilson, 1954; Hepworth 1954).

The debate in the US was being mirrored by the UK where the term marginal costing was being used more widely (Beyer, 1955; Halford, 1959). In 1961 the ICWA commissioned its own report into marginal costing covering key elements such as the separation of fixed and variable costs, contribution and other short term uses of marginal costing such as limiting factor analysis, pricing and break even analysis and concluding that it is a tool for understanding cost behaviour and aiding management decision making (ICWA, 1961).

The overarching issue of stock valuation and financial reporting was finally put to rest with the issuance of SSAP 9 in 1976, giving credence to Watts and Zimmermann's (1979) view that accounting theories are linked to various

parties' interests, in this case the Inland Revenue, government and the professional bodies.

Evidence of usage of marginal costing varies as does the range of techniques associated with marginal costing. Across the world there appears to be continued use, Chenhall and Langfield-Smiths' 1998 Australian study showed 76% of organisations using some form of variable costing; Sulaiman et al 2004 evaluation of Asian countries showed widespread use of Cost-Volume-Profit analysis, in the UK Abdel-Kader and Luther's 2006 study of the food and drink industry showed the ability to separate costs between fixed and variable was important to 83% of respondents and that 48% often or very often used this information for decision making. Ross and Kovachevs 2009 study however shows the technique to be less popular at just under 40% but by being used by consistently by all sizes of organisations. In the US Clinton and White (2012) identify that break-even analysis is used less extensively between the survey of practice conducted in 2003 and 2012.

2.3.6 Capital budgeting

Long-term decision-making is conducted through the techniques of capital budgeting and the use of specific tools such as payback, net present value and accounting rate of return. The use of discounted cash flow (DCF) techniques can be traced back to railway engineers in the 1880's (Lowry, 1990). These methodologies allow the organisation to evaluate the use of capital resources and the organisations ability to enhance the wealth of the shareholder.

There are several well-documented appraisal techniques that can be used. Academics classify them as either 'naïve' or 'sophisticated' depending on their academic rigour. Rigour in this context means the extent to which a given technique leads to the unambiguous realisation of the shareholder wealth maximisation objective under the most parsimonious assumptions available. The naïve techniques include Payback, discounted payback and Accounting Rate of Return (ARR). And the sophisticated techniques of Discounted Cash Flows (DCF) include Net Present Value (NPV), Internal Rate of Return (IRR)

and the Profitability Index (PI) (Freeman & Hobbs, 1991). This range of techniques is described as 'traditional' for the purposes of this work.

Kaplan and Atkinson (1998) ask whether financial analysis supporting these traditional techniques can effectively aid investment decision-making. Additionally, they ask whether the traditional techniques are still relevant given the significant advances in technology and the rapid expansion of the global economy.

In this context it is worth bearing in mind the words of Lumby & Jones (2000:41): "….none of the methods of investment appraisal can give a definite decision…..all they will do is help communicate information to the decision maker;….the final decision is based on a whole range of very diverse considerations which are beyond our present capabilities to encompass in 'overall' decision making formulae".

These techniques have a long history although their theoretical justification was largely achieved in the early 20th Century through the work of Fisher (1930) and Hicks (1946). The application of the present value concept can be traced back to the 14th Century (Chatfield, 1977) where it was widely used in the field of financial investments. It was in the 19th Century, during the industrial revolution, that economists and engineers became more interested in the problems of capital budgeting and even then it was in the "naïve" techniques of payback and then ARR.

Even up to the Second World War, capital expenditure was justified using expected monetary return (Chatfield, 1977). Capital budgeting came to the fore in the 1950's but even at that time managers based decisions on the degree of necessity or ability to postpone (Dean, 1951). In this respect, much of this early literature foreshadowed more recent work in the area of 'real options' where the possibility of abandonment and postponement are priced using Option Pricing Theory. The DCF technique was not accepted as a decision tool in industry until the 1960's (Lefley, 1997).

Numerous surveys of practice have been conducted in this area over a number of years all around the world, identifying which tools are used and how DCF has been applied such as Graham and Harvey, 2001 in the US and Drury and Tayles 1996 UK work which show high use of payback whilst Ryan and Ryan (2002) showed NPV to be the most popular tool in the US and Kester et al's 1999 research in pacific rim countries also showed NPV to be the most popular tool. The general survey work of Sulaiman et al (2004) suggests that capital budgeting is given less attention in China, whilst Clinton and White (2012) find that capital budgeting tools are used less extensively in 2012 compared to 2003 in the USA and Ross and Kovachev (2008) show that NPV is popular for investment decision making (just under 80% of respondents) whilst payback is the second most popular technique in organisations based on CIMA member opinions worldwide.

2.3.7 Traditional performance measures

A performance measure may be defined as "a metric used to quantify the efficiency and/or effectiveness of action" (Neely et al, 1995:80), and a performance measurement system as "the set of metrics used to quantify both the efficiency and effectiveness of actions". Other academics have broadened the definition of the performance measurement system and suggest that the system is linked to achievement of operational or organisational goals and strategy (Khan and Shah, 2011).

The origins of performance measurement can be traced back to the origins of double entry bookkeeping in the 13th century (Johnson, 1981) but notably became part of accounting systems in two phases according to Ghalayini and Noble (1996). The first phase began in the late 1800's and the second began in the 1980's when criticisms of traditional performance measures came to the fore. Traditional performance measurement was very closely linked to management accounting and early accounts of performance measurement were tied to the productivity and efficiency with which budgetary control and

standard costing controls were associated (Bourne et al, 2000; Badam et al, 2013).

Ghalayini and Noble suggested that as a result traditional performance measures tended to focus on financial data and included measures such as "return on investment, return on sales, price variances, sales per employee, productivity and profit per unit of production" (1996:64). The cost accounting performance measures were adapted over time to include changes in relation to labour from piecework to wage systems for which measures to motivate employees were required (Johnson, 1981).

As organisation structures developed so did the performance measures. Divisional and departmental information was produced to manage operations on a daily basis and compare costs between different departments and divisions (Johnson, 1978). The scientific management movement also aided in the development of further efficiency performance measures on the shop floor of manufacturing businesses (Khan and Shah, 2011).

Other major developments came from individual organisations such as Du Pont, General Motors and General Electric, (Johnson, 1975; Eccles, 1991). Johnson (1975) records the development of the return on investment (ROI) measure at Du Pont to be one of the key innovations in management accounting to provide an overriding measure of the commercial success of both the operating units and of the whole organisation which coupled with the pyramid of ratios allowed a snapshot of the financial health of an organisation.

Kaplan (1984b) highlights the fact that whilst organisations such as Du Pont and General Motors had made a significant contribution to the success of large corporations up to that point with the development of profit centres and ROI, problems were emerging due to executives focusing on short-term financial performance targets. This was a key element in Johnson and Kaplan's 1987 thesis and one which sparked academics to question the value of these traditional based performance measures.

The criticisms of these traditional measures centred on a number of elements. Predominantly the main concern was that these measures focused on the management accounting systems which were already found to be lacking in the modern organisation in terms of overhead allocation and product costing and therefore any performance measures produced from these systems would also be flawed, (Ghalayini and Noble, 2011).

Further criticisms which are cited by a number of academics including: Hayes and Abernathy, 1980; Kaplan, 1983; Kaplan 1990; Hayes et al, 1988; McNair et al 1989; Eccles, 1991;Kaplan and Norton, 1992) revolving around a number of issues, including the fact that they are lagging measures as the financial information on which they are based are closed monthly and therefore they are as a result of past decisions. They tend to focus internally at operations and do not include an external outlook and have therefore little link to the strategy of the organisation. They are also considered to be of little value in respect to changing organisations which require more than a financial overview and a move to qualitative measures which take in to accounting customer requirements and the need for continuous improvements.

In spite of the criticisms empirical evidence suggests that the traditional measures are still widely used in practice. Considering the empirical studies over time, McKinnon and Bruns 1992 study of American organisations showed that profit and income remained the most popular methods for evaluating corporate performance. General surveys of management accounting techniques such as Chenhall and Langfield-Smith, 1998; Joshi, 2001 and Sulaiman et al 2004 all continued to show the dominance of financial based traditional measures. Ross and Kovachev (2009) showed clearly that ROI and profit are still in the top 20 management accounting tools and are extensively used across all sectors predominantly in the UK.

2.4 Management Accounting Relevance Lost

The above review of the historical developments of management accounting and the traditional approaches confirms the view held by Kaplan (1983, 1984, and 1985) and Johnson and Kaplan (1987) that most of the management accounting tools employed in the 1980's and recorded in mainstream management accounting textbooks had been fully developed by 1925. The only notable exceptions are the marginal costing debates and the development of DCF methods of capital budgeting.

The chief reason for the perceived stagnation of management accounting ideas stems from the wider social and economic environment in which management accounting exists. Ashton et al, (1995) showed evidence that in the 1950's and 1960's countries such as North America and Britain held dominant positions in international markets and competition was relatively low for their products as such managers focus was internal and therefore their demands for information from management accounting was also internal and related to production capacity. Whilst a variety of costing information was generated systems were reactive and mechanical in nature and as such there was little need to consider improving or changing the systems which has been in place since the 1920's.

During the 1970's and 1980's a number of changes occurred in the wider economic and social environment including a word wide recession, increase in global competition and rapid technological developments, Ashton et al (1995).

The rapid technological developments had a number of effects on businesses including the ability to reduce cost of production and increase quality with a lower level of direct labour input and also to increase informational processing ability and reduce the cost of providing information within organisations (Scapens 2006b).

In particular a number of advances were made in manufacturing settings with new production techniques and approaches including Materials requirement planning (MRP), Just-in-Time systems (JIT), Computer aided design (CAD),

Computer aided manufacture (CAM) and Flexible manufacturing systems (FMS) are the main ones which had an impact (Bromwich and Bhimani, 1989).

Johnson and Kaplan (1987) identified these changes as a challenge for management accounting systems, purporting that the systems must produce information to aid in the timely control of costs, allow appropriate pricing decisions and allow performance management to take place. Johnson and Kaplan voiced the concern that accounting systems had not changed, developed or evolved with the economic and social changes and that was why relevance was lost.

Their (Johnson and Kaplan's) work was predominately founded by observing the changes which had affected North America over the late 18th and the 19th century.

In their seminal text (Relevance Lost: The rise and fall of management accounting, 1987) they cite the following overriding reasons why they felt relevance had become lost.

Their first claim is that this was in part due to the dominance of financial reporting requirements which had developed. This was recorded above with the use of absorption costing becoming the recognised method for adding overheads to closing stocks of production for financial reporting (in the UK under SSAP9). As Johnson and Kaplan recognise though this in itself did not stop companies maintaining more detailed management accounting information; the lack of technology would have made running two systems costly and the information would not necessarily be timely in nature to aid decision making.

The focus on financial accounting has then led to further issues one of which is short termism. Ezzamel et al (1990) when reviewing Johnson and Kaplan's 1987 work comment on the fact that financial accounting based performance measures which focus on earnings elicits a short term behaviour in managers to try to achieve these goals and targets but the most appropriate ways to raise earnings is by holding a long term view and investing in research and

development and new product development. Johnson and Kaplan provide evidence from articles and research which criticise US executives for their "narrow short-term outlook" (1987:195).

Consequently Johnson and Kaplan uphold the view that as a result of satisfying the needs of financial accounting the cost information became too aggregated and ceased to become useful for management decision making in addition to the fact that it was no longer timely and could not be produced in a manner to aid operational control. Kaplan (1985) found evidence that the management accounting systems were unchanged from the 1940's and 50's and that even though there was now computerisation in management accounting this extended really only to an automated version of the original manual tasks.

Their (Johnson and Kaplan's) final point related to the links between practice and academics. Whilst they agree that there were a few academics that were making contributions to the wider debate as to the usefulness of a financially orientated system of costing they suggest that many academics simply did not focus their attention on the problems being faced by real managers in real organisations with multiple products instead they focused on simplified versions of organisations. In conjunction with this practitioners who had been key in the innovations in the early 20th century also no longer spoke about their experiences and appeared to Johnson and Kaplan to be "uninterested in management accounting research or innovation" (1987:177).

Johnson and Kaplan made clear what they felt were appropriate solutions to reverse the fortunes of management accounting and make management accounting information relevant and valuable to organisation managers. They suggested that systems should focus on the ability to facilitate process costs and calculate product costs and, that perhaps separate systems should be created in order to achieve these objectives and produce more timely information. They also suggested that replicating the approaches of the successful Japanese firms and their management accounting systems. Additionally they turn to the work of Michael Porter (1985) to extend the idea that a focus must be placed on costs outside the organisation including selling distribution and service costs.

Finally Johnson and Kaplan propose a move away from short-term performance measurement to a system of long term measures linked to strategy and a focus on non-financial as well as financial information.

Johnson and Kaplan's criticisms were strongly endorsed in North America by both the National Association of Accountants (NAA) in the USA and the Society of Management Accountants of Canada (SMAC). Indeed the SMAC also voiced the opinion that much of what was being taught on management accounting courses would be of little use to managing contemporary operations or forming strategy (SCMA, 1988 cited by Bromwich and Bhimani, 1987:2).

Johnsons and Kaplan's thesis sparked a wide spread debate on the 'crisis' in management accounting. The most prominent critiques of the work came from the UK in the form of Bromwich and Bhimani (1989), Ezzamel et al (1990) and Ashton et al (1995).

Bromwich and Bhimani's work in 1989 was at the specific request of CIMA to identify "the criticisms being made, the way in which management accounting techniques already exist to meet them, and the findings of research in this field and any gaps that might initiate further research" (1989:1).

Their (Bromwich and Bhimani's) critique firstly expresses the view that the 'crisis' as perceived by Johnson and Kaplan is expressed from a US perspective and that there is little reason to suspect that the same problems occur in the UK. In order to support this view they examined the claims made by Johnson and Kaplan starting with the dominance of financial reporting.

They suggested that in the UK hard evidence was not very supportive of Johnson and Kaplan's (1987) view. Subsequent research conducted by UK academics supported Bromwich and Bhimani's view including Hopper et al (1992) whose interviews with six case study companies failed to show evidence of domination of financial accounting even though the organisations had a single system of reporting and Joseph et al's 1996 survey of 308 CIMA qualified management accountants which also showed no compelling evidence of the dominance of financial accounting in UK organisations.

It is evident from the accounts of Bromwich and Bhimani, 1989 and Ashton et al, 1995, that the changes affecting US organisations were also affecting those in the UK. There was a decline in the absolute size of Britain's manufacturing industry and its per capita gross domestic product for the manufacturing sector was lower than any of its major country competitors (The Develin Report, 1988). The effect of this was some companies went out of business but some embraced new technology and became more cost-effective. Ashton et al, 1995 also comment that at this time the growth in non-manufacturing sectors began in earnest and that conventional cost accounting was also found wanting in effective management and control of those sectors.

Bromwich and Bhimani (1989), also found evidence in the UK which supported Kaplan's assertion that costing systems were not providing appropriate or timely information for operational or management control citing Finnie, (1986), who reported that the 20 UK companies in his study did not have costing systems robust enough to handle the introduction of Advanced Manufacturing Technologies (AMT's). Bromwich and Bhimani also comment that there was evidence that British firms were slower to invest in AMT's that those in other countries.

Bromwich and Bhimanis' subsequent review of UK empirical evidence (chapter 5, 1989) provided a view that there was adaptation of management accounting in organisations adopting AMT's and employing better use of technology and that the nature of management accounting did need to change in favour of providing more qualitative information, having a better understanding of marketing issues and becoming integrated with the strategic elements of the organisation.

Whilst Bromwich and Bhimani shared Johnson and Kaplan's view that the Japanese method of addressing the changing nature of manufacturing and competitiveness was useful they cautioned that methods should be considered within a UK context.

In terms of Johnson and Kaplan's claims that management accounting research had also stalled this was again refuted in the UK. Scapens (2006a) comments

that while UK academics were sympathetic to the idea that there were problems facing management accounting in the 1980's, UK management accounting researchers had already responded to the need to research practice (Scapens at al, 1987). Ashton et al (1995) point out at this time the theory practice gap was becoming evident and that this prompted some researchers interested in management accounting practice to evaluate social theories as a means to better understand accounting practice including notable UK academics such as Robin Roslender, Richard Laughlin, Tony Lowe and Trevor Hopper.

Hopper and Armstrong in their 1991 paper also provide a critique of Johnson and Kaplan's 1987 work in which they form a labour process perspective of management accounting in contrast to the transactional cost accounting put forward by Johnson and Kaplan in which they comment on efficiency rather than the relationship between management accounting and the effort of the workforce.

Loft (1995) and Ezzamel et al (1990) also offered a critique of Johnson and Kaplan in respect to their interpretation of history in defining the cause of the problems with management accounting. Both these texts suggest Johnson and Kaplan followed a particular path of American history using the work of Chandler (1977) which focused on a narrow band of the largest organisations and the development of the transaction cost economic lens to search for economic efficiency. Loft again offers the labour process perspective of Hopper and Armstrong as an alternative view to show how management accounting developed as way of controlling labour as well as viewing management accounting history from a traditional and neoclassical approach by building up the development of management accounting techniques over time. Loft also considers a Foucauldian approach which shows the origins of the disciplinary techniques of management accounting to be tied with certain events such as war.

Ezzamel et al (1990), are particularly concerned about the remedies that Johnson and Kaplan put forward as a result of their interpretation of history. They mainly concerned themselves with looking to the Japanese companies

and suggest that the culture and power dominance in Japanese firms contrasts with the individualistic approach in US and UK organisations.

In their final chapter Bromwich and Bhimani (1989) identify their own suggestions as to where management accounting may develop in the future.

They first pay attention to AMT environments and consider the importance of informal communications and the need to make management accounting practice fit better with the operational activities of the business, they also advocate considering the social organisational and behavioural process involved in implementing management accounting methods.

A further suggestion was for the incorporation of non-financial information in performance measures, empirical evidence (Mackey, 1987) showed that where accounting systems do not include quality, customer or efficiency information the accounting numbers are being ignored by managers.

The final suggestion made was to make management accounting more externally focused and that strategic management accounting could be used to aid the organisation.

It is clear that Johnson and Kaplan's thesis and the UK response of Bromwich and Bhimani sparked management accounting researchers to re-evaluate their work and to consider new approaches and tools which may aid organisations into the future (Scapens, 2006a, Cotton, 2005). Otley (2008) suggested that there had been more management accounting innovation in the twenty years since Johnson and Kaplan's book had been written than there had been in the previous fifty years. The following section highlights the key developments and changes which have occurred since the 1980's as contemporary tools of management accounting.

2.5 Contemporary tools of Management Accounting

In order to evaluate contemporary tools the author has developed the following framework to categorise the techniques:

Extensions to existing practice	Better budgeting and beyond budgeting Throughput accounting
New techniques	Activity Based Costing (ABC) and Activity Based Management (ABM) Kaizen Costing
Strategic Management Accounting	Benchmarking Multidimensional performance measures Lifecycle costing Strategic Cost Management Target costing Attribute costing Value chain cost analysis Quality costing Customer Profitability Analysis (CPA)

2.5.1 Extensions to existing practice

2.5.1.1 Budgeting

Much of the concern with traditional budgeting has persisted since the 1980's and has become more pronounced as organisations have continued to develop and change and the business environment has become more competitive and

turbulent. A joint report produced by CIMA and the Chartered Accountants of England and Wales (ICAEW) in 2004 identified that whilst there was a clear indication that budgeting in general failed to meet all the expectations of managers, the budget still provided a focus for organisations and the report also adds that large companies would struggle in their planning and control without them.

Neely et al 2003 identified that the budgeting process took up 20% of management time and that 80% of companies at that time were dissatisfied with their budgeting process. Neely et al were commissioned in 2003 to consider what academic literature proposes as solutions to the problems and also what was being done by practitioners in order to highlight best practice in budgeting.

Neely et al's research found many of the same problems in practice as have already been discussed by academics and reported by practitioners, as a response to this they highlighted several budgeting adaptations from the literature which could lead to 'better budgeting'.

These tools were:

"1. Activity Based Budgeting (ABB)

2. Zero Based Budgeting (ZBB)

3. Value Based Management

4. Profit Planning

5. Rolling budgets and forecasts"

Neely et al (2003:24)

ABB involves grouping costs and revenue by activity and evaluating the value that is added in providing the activities. It is a technique which is an offshoot of Activity Based Costing (to be discussed later) and ZBB requires the budgeting process to be started from a zero base each year with each item of expenditure and revenue justified. Neely et al (2003) reflect that whilst these techniques

have value they are in some ways more time consuming than the traditional approaches and they subsequently recommend them for one off use rather than regular use.

Value based management is not a budgeting tool as such but allows a focus on areas of the business which add or detract value and link that with strategy. A lack of a clear link with strategy has been identified as a short coming of traditional budgeting (Neely et al, 2003; Libby and Lindsey, 2010; Goode and Malik, 2011). Profit planning also involves consideration of value in profit centres and ensuring sufficient cash is available for the long term survival. Neely et al, point out that there is not sufficient evidence in the UK to support the use of these methods.

The use of rolling budgets and forecasts involves regular updating of budgets to take account of changes internally and externally making the forecasts more accurate and responsive. Of all the techniques put forward by Neely et al they suggest this one had the most use in organisations but they recognised that none of the methods provide a full solution.

Since this work of Neely et al other academics regularly refer to these five techniques as being the tools of better budgeting (Goode and Malik, 2011; Libby and Lindsey, 2010; Jones, 2008)

When considering practitioners Neely et al (2003) identified them as falling into three groups: The first were firms that were trying to adapt their existing practices to avoid gaming and were producing rolling forecasts. The second group were also persisting with their traditional methods but were making better use of technology and finally those that had taken a radical re-engineering approach.

The radical re-engineering approach was undertaken by those organisations which had ceased to use the traditional budgeting tools and were soon absorbed into the ‘beyond budgeting’ school of thought.

Beyond budgeting is not another set of tools but requires a complete change in an organisations culture and management style, Becker et al (2009). Hanson (2011) suggests that it can be undertaken in two phases first a change in performance management which is more closely aligned with competitors and best practice benchmarks and second by decentralising the structure of the organisation. Daum and Hope (2003) also add that performance reviews become more frequent and the decentralised structure allows authority and decision making to move lower in the organisation which can improve performance and decision making.

Beyond budgeting is attributed to Hope and Frazer who first studied organisations which moved away from traditional budgeting in 1997. As a result of their research they created a website and a Beyond Budgeting Round Table designed to allow organisations share best practice performance evaluation, planning and control in a decentralised structure.

Empirical evidence supplied by Rickards in 2006 suggested a small but growing number of organisations adapting to the beyond budgeting ideals in many countries around the world and subsequent field studies such as Østergren and Stensaker, 2010 and Bormistrov and Kaabøe, 2013 give further insights into how beyond budgeting has been integrated into some organisations. In spite of this, Goode and Malik, (2011) suggested beyond budgeting was still in its infancy. The most recent research appears to corroborate that view: Ross and Kovachev's 2009 work for CIMA which covered a range of organisations of different sizes mainly in the UK and clearly showed beyond budgeting as the least popular budgeting tool and that the most widely used tools were ZBB and rolling forecasts which were considered as 'better budgeting' tools. Libby and Lindsey (2010) and Clinton and White's (2012) research both showed a lack of uptake for newer ideas in budgeting and sustained use of the traditional approach.

2.5.1.2 Throughput Accounting

The origins of throughput accounting (TA) stem from the development of a production management philosophy known as the Theory of Constraints (TOC). The phrase Theory of Constrains originates with Eli Goldratt who through his influential books and papers developed the theory (Kim et al, 2008). TOC is built on the understanding of scheduling production in order to maximise an organisations performance particularly using the knowledge of bottlenecks in order to improve efficiency and profitability (Balderstone and Keef, 1999). At the early stages of Goldratt's work "conventional accounting was not prioritized as a problem, nor was new accounting sought as a solution" (Jones and Dugdale, 2000:8).

Dugdale and Jones (1997) state that it is the application of TOC to accounting that is labelled as throughput accounting, though Noreen et al, (1995) highlight that in North America and Europe the extent of accounting involvement was that the accounting technicians should find their own measures to evaluate the success of their practices.

As far as the UK is concerned there is some contention over the term and there is reference to the work of Galloway and Waldon from 1988(a,b) and 1989. Dugdale and Jones (1997) amongst others (Noreen, et al 1995; Watson et al, 2007; Naor et al, 2013) recognise that there are a range of terms and techniques used under the name of TA.

The calculation of throughput is based on deducting from revenue only those costs which are truly variable in the short-term which in practice is most likely to be only material. Jones and Dugdale (2000) suggest that in traditional accounting terms what Goldratt created was an extreme form of marginal costing. They also go on to comment that whilst the ideas were not new Goldratts aim was to simplify management accounting and narrow down performance.

Galloway and Waldron (1988a) began their work on TA from the same view point and created new terms to describe their approach. Through a series of

three articles in Management Accountant (1988a,b,1989) they also suggested that all costs excluding material were fixed in the short-term and that there was no need to distinguish between direct and indirect costs as all costs excluding material should be considered in the total factory cost. In particular they purported that it is not products which are unprofitable but businesses and therefore their TA is concerned with calculating the rate at which businesses make money and maximising the return through bottleneck processes, (Dugdale and Jones, 1998).

In the second of their articles Galloway and Waldron (1988b) introduced ratios which could allow for the ranking of products in respect to their throughput contribution (similar to contribution per limiting factor). Finally in their third article (1989) they created an overarching primary ratio for the business which should focus on increasing throughput.

Dugdale and Jones (1998) provide a critique of Galloway and Waldron's work in which they comment on the similarities of the work to limiting factor analysis and also arbitrary nature of the use of the primary ratio. They also evaluate Waldron's (1994) viewpoint that it is how something is used in practice that is important rather than the theoretical foundations, and that he was more concerned that the measures were designed to focus on the purpose of activity and change people's thinking and actions.

Following its introduction there has been evidence of take up of the ideas, Dugdale and Jones, (1998) showed how it had become a part of teaching texts and part of the CIMA syllabus. Kim et al (2008) conducted a systematic review of literature and found a continuous rise in the number of peer reviewed articles written about TOC and TA. In practice Davies and Sweeting (1991) in their survey of 677 UK manufacturing companies found that 40% used or planned to introduce TA. Watson et al 2007 comment that though there is documented use of TOC in some of the top US companies the tools do not seem to have been brought into mainstream acceptance.

2.5.2 New Techniques

2.5.2.1 Activity Based Costing

Activity Based Costing (ABC) developed following Kaplan's (1984b, 1985) work which reviewed the state of management accounting in the US. Kaplan in looking for innovative accounting practices came across a revised system of costing introduced at John Deere which combated one of the problems put forward by Kaplan that in the new organisational environment overheads were not being appropriately absorbed into products. At the same time colleagues of Kaplan's – Robin Cooper and Tom Johnson were investigating the costing systems in other organisations and found similar systems in place. The subsequent findings were recorded in the Relevance Lost text (Johnson and Kaplan, 1987). Kaplan also found evidence that it was not just manufacturing organisations which were changing their systems but also service providers such as banks too (Kaplan, 1994). Cooper and Kaplan began writing papers on ABC and its potential to appeal to the wider business community in 1988 (a,b).

The base premise of ABC is as an alternative to the traditional absorption costing methodology employed by organisations. Overheads are grouped into cost pools and appropriate drivers are found which show more effectively how costs are consumed (Bhimani and Bromwich, 2010).

Cooper and Kaplan (1991:130) state "Because ABC reveals the links between performing particular activities and the demands those activities make on the organisation's resources, it can give managers a clear picture of how products, brands, customers, facilities, regions, or distribution channels both generate revenues and consume resources. The profitability picture that emerges from the ABC analysis helps managers focus their attention and energy on improving activities that will have the biggest impact on the bottom line".

Bromwich and Bhimani (1989) in their response to Johnson and Kaplans relevance lost provide a UK perspective on ABC. They suggest that whilst at the time they could see potential benefit in the use of cost driver analysis

through the work of Banker and Johnson (1988), Foster and Gupta's (1988) empirical work in the UK at that time showed a reluctance to change from traditional cost accounting techniques this is further supported by the research of Geri and Ronen in 2005 who also state that organisations persist in using traditional systems even though their faults are well documented.

There is little doubt from reviewing literature (Bhimani and Bromwich, 2010; Scapens, 2006a; Stratton et al, 2009; Cardos et al 2012; Bjornenak and Mitchell, 2010) that there has been a sustained academic interest in ABC since the late 1980,s. Bjornenak and Mitchells 2010 work which focuses specifically on the proliferation of literature surrounding ABC comment that as a topic it has left a significant mark on the landscape of accounting journal literature, with work from practitioners as well as academics and that it has also resulted in a range of research methods such as the quantitative influence of US papers to the case study and field work studies of the UK.

In terms of use in real organisations there is a mixed picture. Cardos et al, 2012 suggest that whilst academic interest has been high adoption and implementation has remained low. In the USA surveys over time such as Groot (1999); Horngren et al, (2000); Cagwin and Bouwman (2002); and professional body surveys such as the Bain and Co reports (Rigby and Bilodeau, 2007) and the Business Research and Analysis Group (BRAG) found low usage of the tool and poor satisfaction but higher numbers considering adoption. Kaplan and Anderson, (2004) suggested that organisations abandoned ABC because their operations were too complex; it took too long to implement and was too expensive to develop and maintain.

In Europe a similar picture emerged Burns and Yazdifar (2001) found only 31% of CIMA members surveyed had adopted ABC though 39% expected it to become important in the future. Surveys conducted by Innes et al (2000) and Drury and Tayles (2000) showed a 15% take up rate amongst the UK companies they surveyed, the work by Innes et al followed up an earlier study by Innes and Mitchel (1995) and showed a decrease between 1994 and 1999, in terms of the number of companies adopting and considering adopting ABC. Yazdifar and Askarany (2010) conducted research in the UK, Australia and New

Zealand and found a relatively low adoption rate with on average 27% of respondents either adopting or proposing to adopt the techniques in the future amongst all three countries. Specific European studies such as Clarke et al (2002) and Aberjule (2006) found take up rates of below 20%. Asian research including Joshi (2001) and Sulaiman et al (2004) confirm a similar adoption rate there.

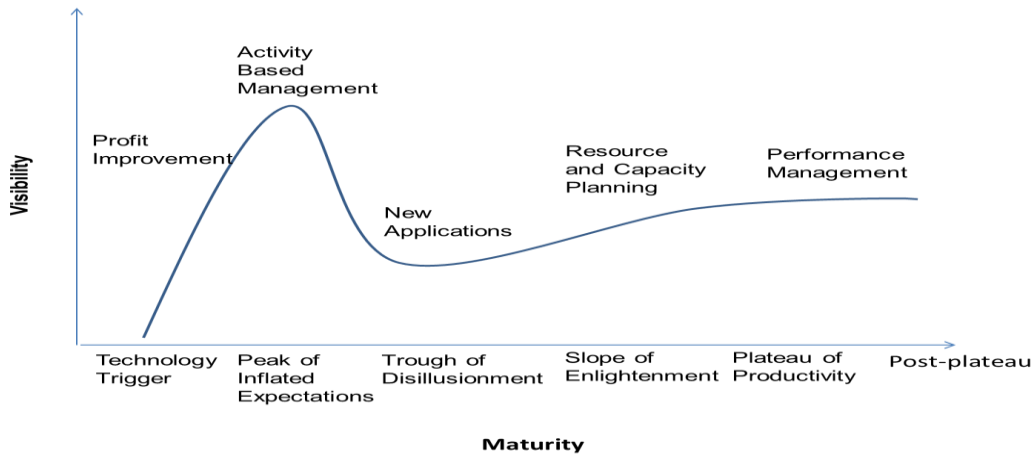
2.5.2.2 Activity Based Management

The term Activity Based Management (ABM) was first coined by Johnson in 1991. At that time he was moving away from the definition and application of ABC supported by Kaplan and was more concerned with management of activities than costs.

Covey (1990) suggested that ABM can enable managers to view costs and profits differently and allows managers to make decisions using fast and relevant information. He also suggests that many organisations have seen ABM as a real source of competitive advantage.

Turney (2010) through the use of the hype cycle in the figure 2.2 below shows the evolution of ABC into ABM as technology has improved the information available.

Figure 2.2: The Hype Cycle



Source: Turney (2010:34)

Gosselin 1997 suggested that ABC was the final of three stages of ABM. The first being Activity Analysis (AA) and the second Activity Cost Analysis (ACA). Baird et al (2004) argued that organisations may not use all three stages but may enact ABM after the cost analysis stage as the objective of the organisation may be in cost reduction or process decisions rather than product costing. This view was also held by Nanni et al (1992) who found organisations did not implement ABC as they obtained most benefit from ACA. Phan et al (2014) suggest that previous studies have not accounted for the use of ABM at the different stages and this would account for an inaccurate picture of the use and success of ABM in practice. The survey work of Innes and Mitchel in 1995 would also support this view as respondents were asked which aspect of ABC they applied, 88% replied that they used it for cost reduction whilst only 29% used it for stock valuation. Jones and Dugdale (2002) show a clear indication of the increase in academic literature regarding ABM during the 1990's and its distinction from ABC.

2.5.2.3 Kaizen costing

The move towards new production management techniques brought to the fore the need to Account for Advanced Manufacturing Technology (AAMT) (Roslender, 1995). The approach is to consider operations and management rather than the activity approach heralded by Cooper and Kaplan, (1991). According to Roslender (1995) the objective of most AAMT techniques is to seek ways to measure performance improvements linked with continuous improvements.

Kaizen costing focuses on small continuous improvements to the product cost during the manufacture of the product with managers setting cost reduction targets (Modarress et al, 2005). Monden and Hamada, (1995) in exploring how Japanese automobile companies use Kaizen highlight how it is different to standard costing which only seeks to maintain a standard not reduce the cost of the product and how it must be linked to target costing in order to achieve total cost management across the whole life of the product.

As an individual tool there is little academic evidence of how widely the principles of Kaizen have spread from Japanese companies even though there is significant evidence of academic attention directed at mirroring the Japanese philosophies (Johnson and Kaplan, 1987; Currie, 1993). In the UK however Jones et al (1998) argued of that the social differences between the UK and Japan would hinder the adoption of Japanese techniques in the UK and organisational redesign would be necessary in order to fully embrace the techniques but could provide no empirical evidence to support their view.

2.5.3 Strategic Management Accounting

Simmonds first coined the phrase Strategic Management Accounting (SMA) in 1981 before Johnson and Kaplan sparked the relevance lost debate. At that time he suggested that management accounting needed to become more strategic by extending management accounting analysis to competitors. In the context of using SMA for pricing he suggested that management accountants stopped short of providing the competitive information required instead focusing on internal cost-volume-profit data, (Simmonds, 1982).

In response to Johnson and Kaplan's (1987) critique of the state of management accounting Bromwich (1988) drew on the work by Simmonds and observed that organisations compete on a number of strategic variables of which product cost is but one and that there was therefore a need for management accounting to become more external focused and released from the factory floor.

Bromwich was keen to extend the focus of SMA suggesting "Strategic management accounting goes beyond collecting data about the business and its competitors as it involves evaluating the benefits of products from the customer's point of view as well as the firm's" (Bromwich and Bhimani, 1989:95).

Roslender and Hart (2003) reflect that it was the above coupled with the characteristics of a long term outlook and broader emphasis that heralded SMA

as a “potentially important departure for the practice of accounting to management” (p 256).

Three strands of practice evolved from the early discussions of SMA and these were attribute costing, strategic cost management and target costing (Bromwich, 1990; Shank, 1989; Cooper and Kaplan, 1991). However the term SMA itself failed to make an impact on practice.

Tomkins and Carr (1996) reflected that at that time there was no framework for SMA and Lord (1996) has been well quoted as saying that SMA is “but a figment of academic imagination” (p 364). Tillman and Goddard (2008) reflect that much of the research at the time was normative and disconnected from what was happening in organisations a view supported by Guilding et al (2000) who found that the term SMA was not widely used or understood by managers.

Lords 1996 work drew together the work of some of the writers in the field such as Bromwich, Shank and Govindarajan and Simmonds to create a four element framework of SMA and used a case study to show that practices like SMA were being adopted in the case company but through the marketing rather than management accounting function and with non-financial rather than financial information. Other researchers (Perera et al, 1997; Ittner and Larcker, 1998; Vaivio,1999; Smith, 2002) support this view that the emphasis on non-financial measures is necessary to respond to the challenges of managing new environments and new competition.

Roslender and Hart (2010) reviewed the literature over the past thirty years and ascertained that there were three distinct conceptions of SMA that appeared in the literature.

The first is that SMA is made from a number of attempts to combine ideas from the literature on strategy into management accounting. These would include the efforts of Porter (1985) in competitive advantage and Simons (1987) on management control.

The second is that it is a marriage between management accounting and marketing termed by Roslender in 1995 as accounting for strategic positioning.

Roslender and Harts final perspective is that it is a term to encompass the wide range of 'new' management accounting techniques that may be considered to have a strategic intent. This is a view popular in the literature with Guilding et al (2000) giving their view of which techniques could be considered SMA having reviewed the literature and finding the themes of marketing orientation (Simmonds, 1981); focus on competitors (Bromwich, 1990); long-term forward looking orientation (Wilson, 1995).

They settled on twelve techniques and in subsequent work (Cravens and Guilding, 2001; Guilding and McManus, 2002; Cadez and Guilding; 2008) this was extended to 16 techniques.

The following techniques are those generally recognised in the literature to be SMA in nature.

2.5.3.1 Costing tools

2.5.3.1.1 Attribute Costing

Guilding et al (2000) suggest that attribute costing is based on Lancaster's (1966, 1979) assertion that products are a package of attributes which appeal to customers. It was Bromwich who brought attribute costing to the fore in his reformulation of SMA. The key aim of attribute costing is to cost the benefits that products provide to customers (Roslender and Hart, 2003). In Bromwich view (1990) these benefits are the ultimate cost drivers and not the activities that a product consumes which is the base premise of ABC.

Guilding et al (2000:118) put forward the following as examples of product attributes: "operating performance variables, reliability and warranty arrangements, the degree of finish and trim as well as service factors such as assurance of supply and after sales service". Roslender and Hart (2003) highlight the link between attribute costing and strategic cost management (another tool considered in this section) suggesting that a matrix would be needed to match attributes valuable to customers with the costs associated in

providing them. This approach requires an external view and a link to marketing hence its justification as an SMA tool.

Specific empirical evidence on the use of this tool is rare and can mainly be found in general surveys of practice where the take up rate appeared to be low (Guilding et al, 2000; Cadez and Guilding, 2008), however, Cinquini and Tenucci (2007) in their study of Italian companies found a high level of adoption (65%).

2.5.3.1.2 Life-cycle Costing

Life-cycle costing (LCC) is a method of tracking and accumulating costs attributable to a product from its inception to the point that it is withdrawn (Bhimani et al, 2012). Historically LCC can be traced back to the 1964 report by the Logistics Management Institute in relation to equipment and was subsequently used in this respect by the US government from 1974 (Elmakis and Lisnianski, 2006).

Extensive literature has highlighted how product life-cycles have become shorter in conjunction with rapid technological change and that these factors have made LCC critical to the success of organisations (Ray and Schlie, 1993; Barfield & Raiborn, 1994; Murthy and Blischke, 2000).

Dunk (2004) provides a commentary on the technique, and suggests from a review of literature, a number of benefits from its use such as the better assessment of planning by comparing budgeted and actual life-cycle costs, ability to make better pricing decisions, ability to aid product profitability by reducing the short-term perspective of management decisions, a link to the environment, as the life-cycle approach allows the environmental impact to be considered at the various stages of the life cycle and also a recognition of the importance of post-sale factors as a part of life cycle costs (Clinton and Graves, 1999; Adamany and Gonsalves, 1994; Hansen and Mowen, 1992; Brady et al., 1999; Shields and Young, 1991, Gulch and Baumann, 2004).

Despite these benefits Dunk (2004) maintained that there had been little evidence of its application in an organisational setting.

2.5.3.1.3 Quality Costing

Porter and Rayner (1992) suggested that organisations competitiveness was being seriously damaged by an inability to cost quality. They reported at the time of a survey of small firms in the North of England which showed that only a minority of firms systematically monitored quality costs and that quality costs were frequently underestimated.

The intention is to classify the costs of quality into four categories: those that relate to prevention of quality issues; appraisal costs which are incurred in detecting quality issues; internal failure costs which are incurred when faults are found before goods go to the customer; external failure costs which are incurred to rectify quality problems after the goods have reached the customer (Bhimani et al, 2012).

Quality costing may be viewed as a means for companies to reduce manufacturing costs and increase productivity and customer satisfaction (Dale and Wan, 2002). A number of models have been developed over time and have been well reviewed in the literature, Schiffauerova and Thomson, 2006 sum up these and appraise the models to date including the P-A-F (Prevention, Appraisal, Failure) model, the Crosby model which is very similar to the P-A-F model in that they both consider costs in the classifications already mentioned, the process cost models which also make reference to intangible and opportunity costs and the activity based costing models which classify using value and non-value added costs.

Schiffauerova and Thomson (2006) go on to reflect on the literature relating to the use of these models in practice and conclude that cost of quality is not a widely used concept however in the small number of cases cost of quality is used it have been very successful with the P-A-F model being used most widely.

2.5.3.1.4 Target Costing

Target costing is an approach to determining the cost at which a product with a particular value and functionality need to be manufactured at in order to maximise the profit earning potential (Cooper, 1996). There are four stages to determining the target cost the first of which is determining the selling price at which the product should be sold. This will involve closely considering the target market and consumer behaviour, this is followed by determining the amount of profit or return that is required by the organisation and finally a target cost can be set. This technique is particularly useful at the design and development stages of new products (Cokins, 2002).

This particular technique which had its origins in Japanese management philosophy (Monden and Hamada, 1991) is often used in conjunction with other tools such as Kaizen costing, value analysis and value engineering to reduce actual costs to the target cost level.

The literature such as Ax et al, 2008; Cokins, 2002; Filomina et al, 2009, shows a number of benefits from the use of target costing including a long-term approach to cost management, greater focus on the customer, better relationships with suppliers, focus on value added and reduced time to market.

Yazdifar and Askarany in 2012 reviewed the literature surrounding target costing and observed that it was mainly associated with Japanese companies and most empirical research took place within this context. Lorino in 1995 found that 80% of large Japanese assembly organisations used the approach. Adoption has been much lower in Western countries for example Ernst & Youngs 2003 research for the IMA showed only 26% of member firms adopting, Chenhall and Langfield-Smith's (1998) research showed 38% of surveyed Australian firms adopting. The technique was ranked 10th out of 11 in Guilding et al's 2000 survey. Ansari et al 2007 reported that target costing was being used widely by leading businesses worldwide.

2.5.3.1.5 Value Chain Costing

The value chain was developed by Porter in 1985 it separates the firm's operations into strategically relevant activities with the aim of better understanding cost behaviour and sources of differentiation (Porter, 1985). Over time other academics have expanded the model to show the its value to management in particular the work of Shank and Govindarajan (1992, 1993) who built an approach to costing based on the framework.

Porter (1985) and Hergert and Morris (1989) were critical of traditional accounting systems and questioned their ability to aid in value chain analysis. Shank and Govindarajan (1992) along with others such as Guilding et al 2000 and Hegert and Morris (1989) advocate the use of an ABC style approach to value chain costing using cost drivers to analyse costs.

Shank and Govindarajan (1992) also demonstrated that the value chain should also consider the firms linkages with suppliers and customers to provide an external analysis to what might be an internal chain.

2.5.3.2 Planning, Control and performance measurement

2.5.3.2.1 Benchmarking

Elnathan et al in 1992 suggested that benchmarking had become central to organisations facing the economic, technological and organisational changes which have been previously described. They go on to comment that whilst benchmarking had already been practiced for some time there had never been a proper name and systemisation for the process.

Benchmarking is unlike traditional standard setting as it is a technique with an external focus which seeks to improve organisational performance by comparing elements such as productivity, competitiveness, costing methods and quality against best practice from other organisations (Elnathan et al 1996).

Chenhall and Langfield-Smith (1998) suggest that it is likely to be more beneficial for high performing companies with product differentiation strategies. McNair and Liebfried (1994) suggested that benchmarking had a number of benefits for an organisation including focusing management attention on broad business principles, the ability to improve management techniques through international best practice and also promote sustained employee commitment as targets are based on the experience of others.

Francis and Holloway (2007) through their thematic review of benchmarking purport that whilst benchmarking started as a manufacturing tool its popularity over time has spread so that it is widely used in the service sector. They go on to say that it was popular first amongst 'blue collar' service such as engineering maintenance and transport and was slower to be introduced in 'white collar' service organisations such as financial services and retail.

Part of Francis and Holloway's review reflected the research conducted into practice and whilst they show through the survey work in the early 1990's the adoption of or intention to adopt benchmarking at the time they reflect that most of the work is based on individual case studies and not through surveys. Other evidence provided by Davies and Kochhar 1999 on UK manufacturing businesses suggested that while benchmarking activities were being undertaken there was a failure to use them to change internal processes and therefore in their study benchmarking results were not being used.

2.5.3.2.2 Integrated Performance measurement

Cadez and Guilding, (2008), state that integrated performance measurement, normally refers to systems of measurement, which encompass both financial and non-financial measures, and are linked to strategy and customers.

There are a number of such models in place which emerged following the relevance lost accusations of Johnson and Kaplan (1987) where they highlighted the short comings of financial performance measures to reflect the changes in strategies' and competition in modern organisations. The best

recognised of these models is the Balanced Scorecard (BSC) which was developed by Kaplan and Norton in 1992.

2.5.3.2.3 The Balanced Scorecard

Within a scorecard the financial measures are complimented by non-financial measures in four broad areas: those relating to shareholder value; those relating to customer satisfaction; those relating to internal processes of the organisation and those linked to the learning and growth of the organisation using both lagging and leading measures (Bhimani et al 2012). Over time the BSC has developed with the original authors (Kaplan and Norton) producing a series of books (1996a, 2000) and articles (1993, 1996b, 2001, 2004). Otley (2008) reflects that in the early 2000's that was a move towards the development of strategy maps which required a causal understanding of the inter-relationships between the areas of the scorecard. Bhimani and Bromwich (2010) suggest that it has moved from a performance system to a full scorecard linked to strategy and has provided a new role for management accountants.

Bhimani and Bromwich go on to comment that the diffusion of the BSC across large firms internationally as been extensive evidenced by the 2007 Bain and Company survey of 1,221 international firms where 66% reported using the BSC (Rigby and Bilodeau, 2007). Arena and Azzone, (2005) found in their review of previous surveys high take up rates in the USA at between 50-60%, 42% in Italy and 31% in Finland.

Despite its widespread use they (Bhimani and Bromwich) state that there is a lack of hard evidence that the BSC improves performance. Norreklit and Mitchell (2007) reviewed the literature and found evidence of widespread satisfaction of the BSC as a tool for implementing and communicating strategy, however the research also found that users were not very knowledgeable about the cause and effect relationships which should guide the selection of the performance measures and they also concluded that "empirical research as yet precludes drawing firm conclusions on the practical worth of the BSC" (Norreklit and Mitchell, 2007:193).

Jones (2004) was able to demonstrate the application of the scorecard model for service excellence in Gulf Bank and suggested that the approach could be used in other service industry contexts.

2.5.3.2.4 Results and Determinants model

The results and determinants model was developed by Fitzgerald et al (1991) following their study of performance measurement in service industries. Using their framework measures are separated into results (Financial, Competitiveness) and the determinants of those results including quality, flexibility, resource utilisation and innovation.

Jones et al (2012) state that the key features of this model is the emphasis on lead rather than lag measures, and the importance of the need not just to identify key measures but to set clear standards and rewards in conjunction with them.

In addition Fitzgerald and Moon (1996) made clear the use of this model when linked to strategy and also benchmarking.

2.5.3.2.5 Performance Pyramid

Developed by Cross and Lynch in 1992 this model links a firms strategies with its operations by feeding objectives down the pyramid and measurement up. Within the four levels of the pyramid there is also an internal and external focus to the objectives and measures.

In his review of performance measurement systems Tangen (2004) reflects that whilst the main strength of this approach is to integrate operational performance indicators with overall corporate objectives it cannot identify key performance indicators or allow for continuous improvement.

2.5.3.2.6 Performance Prism

Neely et al (2001) developed the prism as an alternative model to the BSC It reflects five key facets of performance linked to stakeholders and the value

chain of the business. The authors emphasis it is the focus on stakeholder which differentiate the model from other models and without creating broader stakeholder value shareholder value cannot be achieved.

2.5.3.3 Strategic Decision Making

2.5.3.3.1 Strategic Cost Management

John Shank pioneered the term strategic cost management (SCM) following a similar path to Kaplan and Bromwich following the work of Simmonds in 1981 on strategic accounting. At the time he wrote his first contribution to SCM in 1989 he remarked on the transition from cost accounting to management accounting at then to what he called SCM.

Shank (1989:50) provides a definition of SCM "the managerial use of cost information *explicitly* directed at one or more of the four stages of the strategic management cycle" The major diversion from management accounting was the explicit link to strategy. The four stages of the strategic management cycle being: formulating strategies; communicating strategies; developing and implementing strategies and monitoring performance of strategy.

Within SCM framework he suggested there were three themes which were: value chain analysis, strategic positioning analysis and cost driver analysis.

Shank reflects in 2006 that despite its promise in the 1990's and the number of organisations piloting the approach it failed to take off and many of the projects started never progressed beyond the pilot stage. Though it should be noted that the elements which Shank suggested were 'under the umbrella' of SCM such as value chain analysis and ABC have been more successful.

2.5.3.3.2 Strategic Pricing

Simmonds (1982) linked strategic pricing (SP) to his previous work on SMA using a case study approach. He demonstrated how a traditional approach to pricing using internally-orientated and historically based information can result in a sub-optimal pricing decision but a SMA approach which uses competitor focused analysis can allow managers to make better informed pricing decisions. Guilding et al (2000) suggest that factors that should be considered in SP could include: competitor price reactions and projected market growth. Survey work

undertaken in 1994 by Foster and Gupta and subsequent work by Roslender and Hart (2003, 2010) show the connection between accounting information and the marketing executives in making pricing decisions.

2.5.3.3.3 Brand Valuation

Brand valuation is a topic which may be equally shared by financial accounting and marketing and has been the subject of attention for financial accounting academics for some time, (Guilding and Godfrey, 1995; Guilding et al 2000). Roslender and Hart (2006) document the literature in the UK which charts the financial accounting development of branding through home grown brands and the reporting standards that developed.

It is recognised (Mouritsen, 1998; Guilding et al, 2000; Roslender and Hart, 2006) that brands recognised as intellectual capital can provide the basis for long-term value creation and competitive advantage for an organisation.

On that basis Guilding individually and in his work with colleagues developed management accounting for branding. In his 1992 work he suggested that it had a number of benefits including the ability for accounting and marketing colleagues to work closer together, the ability to produce information to aid brand related decision making and to counter the short-termism of traditional performance measurement techniques.

Empirical evidence from a management accounting perspective is less common than marketing evidence, Guilding and Pike's 1994 survey showed that in the UK brand value accounting was less widely used than in the USA or New Zealand.

2.5.3.3.4 Competitor Accounting

Heinen and Hoffjan (2005) citing Jarvenpaa, 1998 suggest that Competitor Accounting is an independent topic in the field of SMA. It is used to provide a detailed insight into a competitors present cost and financial situation as well as

allow the ability to determine one's own competitive position and also predict future competitive strategic behaviour. It comprises the three elements below.

2.5.3.3.5 Competitor Cost Assessment

Customer cost assessment (CCA) is undertaken by regularly updating customer unit cost information and drawing a comparision with one's own data for decision making purposes (Guilding, 1999; Ward et al, 1992). Guilding et al, (2000) suggest that Simmonds (1981), Jones, (1988) and Bromwich, (1990) are amongst its advocates. Jones (1988) highlighted in particular a methodology to follow in order to conduct CCA.

2.5.3.3.6 Competitive Position Monitoring

This particular technique was advocated by Simmonds (1986) and is designed to be a holistic approach to gathering competitor information. Typical information collected will include sales, market share, volumes and unit costs. The aim of the system is to allow the organisation to assess its position relative to competitors and use this information to formulate strategy (Cinquini and Tenucci, 2010).

2.5.3.3.7 Competitive Performance Appraisal

In 1993 Moon and Bates set out a framework for interpreting financial statements from an SMA perspective. The framework called CORE represents analysis both internally and externally by considering Context, Overview, Ratios and Evaluation. At the time Moon and Bates saw this approach as filling a gap in competitor performance assessment in the SMA literature and suggested strategically significant insights could be made from competitor published financial information.

Heinen and Hoffjan (2005) reviewed the empirical evidence of the use of competitor accounting and found only a small number of contributions in this area. These included the Guilding, 1999, Guilding et al, 2000 and Cravens and Guilding 2001 as well as work by Heysford, 2001 and Meyer, 2004. All of the

studies highlighted the importance of using competitor information but did not show particularly high usage and Heinen and Hoffjan were left with the view that more empirical work was necessary in order to fully understand the benefits and take up of these tools.

2.5.3.4 Customer Accounting

2.5.3.4.1 Customer Profitability Analysis

Innes and Mitchell (1995) state that customer profitability analysis (CPA) uses the ABC methodology with a focus on customers rather than products as the cost object with the effect that organisations have found different levels of cost in relation to customers. They further suggest that this approach allows customer profiles to be better understood as well as better strategic decision making regarding pricing, distribution and service, a view well supported academically (Cooper and Kaplan, 1991; Raaij et al, 2003; Cotton, 2005).

Dalci et al (2010) suggest that in line with other academics (Kaplan and Narayanan, 2001) CPA is particularly useful in a service context because customer behaviour plays a large part in determining the cost of providing a service. Dalci et al (2010:610) cite Zeithaml and Bitner (1996), stating “that the cost of finding and gaining a new customer in service companies is five times greater than the cost of retaining current customers. Therefore, successful implementation of CPA in order to retain profitable relationships with current customers is essential for service companies”.

Survey work in the UK by Innes and Mitchell in 1995 showed that 51% of respondents used ABC information for CPA purposes they also rated it fairly important and fairly successful with a further 12% planning to introduce the technique. In a repeat of the survey work undertaken in 1999 Innes et al (2000) showed sustained use and success of this tool. Interest in CPA has continued over time and the 2009 survey performed by Ross and Kovechev showed a similar percentage of respondents using the tool and a large number planning on implementing it.

2.5.3.4.2 Lifetime Customer Profitability Analysis

The purpose of lifetime customer profitability analysis is to consider future estimates of revenues and costs in relation to a particular customer and so extend the time horizon for customer profitability analysis. Pfeifer et al (2005) suggest that future cash flows should be discounted using the discounted cash flow techniques to create customer lifetime value. Jain and Singh (2002) suggest that customer lifetime value has been well accepted by researchers and business practitioners and those lifelong customers are more valuable to a firm. They also suggest that these methods have become easier to employ since data availability has improved.

2.5.3.4.3 Valuation of Customers or Customer Groups as Assets

Gupta and Lehmann (2003) suggest that customer lifetime value has had a limited impact on businesses due to the complex issue of modelling and that researchers have failed to show a link between the customer and the value of the firm. In their research with Stuart in 2004 they demonstrated with the use of publically available information using case studies how the future value of the intangible assets of customers can be calculated to demonstrate value added to the business. In their findings they show that a 1% improvement in retention of customers has almost five times greater impact than a 1% change in the cost of capital on the value of the firm. They suggest the results show that the linking of marketing concepts to shareholder value is both possible and insightful to strategic management.

2.5.3.5 Empirical evidence of SMA

The literature suggests that on the whole the take up rate for SMA tools is not as high as might be suspected (Chenhall and Langfield-Smith, 1998; Guilding et al, 2000; Cadez and Guilding 2008; Ross and Kovachev, 2009). Chenhall and Langfield-Smith observed that of all the modern techniques ABC had received the most publicity and even there the rate of implementation was slow and at the time of their study target costing and benchmarking were the only other

tools which had some empirical evidence attached to them. In Abdel-Kader and Luther's 2006 study they were surprised to see the low take up of SMA techniques with the exception of CPA.

Cinquini and Tenucci (2007) in their study of the adoption of SMA techniques in mid-sized Italian manufacturers found extensive use of SMA tools in particular attribute costing, customer accounting, strategic pricing and competitor position monitoring. They found the least used to be life-cycle costing and integrated performance measures. These results are very similar to those found by Guilding et al, (2000) where in a survey of UK, US and New Zealand organisations competitor accounting and strategic pricing were the most widely used tools.

2.5.3.6 Summary

It is evident from this review of contemporary tools that there is a great deal of similarity and overlap between them in particular the use of an ABC methodology runs between a number of the tools as does the strategic themes provided by Porters (1985) work on competitive advantage.

2.6 Enterprise resource planning and advanced management accounting

Studies in the early 2000's (Granlund and Malmi. 2000, 2002; Booth et al 2000 and Hyvonen 2003) explored whether there was a link between advanced/strategic management techniques (particularly ABC/ABM) and the use of Enterprise Resource planning (ERP) systems. At the time they could find no evidence to suggest there was a connection between businesses choosing to upgrade and integrate their computer systems and the management accounting tools that were subsequently used. Scapens and Jazayeri, 2003 called for more longitudinal research to be undertaken in this area as a result of their findings that the introduction of an ERP system in their case study company bore the same results. This may be considered somewhat surprising

as the aim of an ERP system is to integrate departments and functions into a single system to allow date to be collected managed and interpreted (Botta Genoulaz and Millet, 2006). Botta Genoulaz and Millet in their 2006 study found that ERP systems were more likely to be utilised by service sector organisations although the service sector organisations were more likely to only utilise a small proportion of a systems capability such as CRM and Human Resource Management.

Gartner and Krichbaum in their 2014 work confirmed in their literature review the position so far stated but in later studies and in their own empirical work found the use of ERP was changing the role of the management accountant by integrating them with more strategic projects and aiding their communication around the organisation. They made no specific claims relating to the use of more strategic or advanced management accounting tools.

2.7 Empirical review

The previous sections showed the development of a variety of tools over time including the traditional and more contemporary tools. In reviewing the tools it has been possible to gauge their use in practice. A review of the empirical work consulted has been undertaken and can be found in Appendix 2. This section will summarise the empirical literature to enable any themes to be picked up regarding the nature of the empirical evidence. Overall 50 individual pieces of empirical evidence have been considered.

In evaluating the literature 10 of the pieces were conducted using case study or interview methods and the remainder by use of either a web or postal survey. The work conducted using case study methods tended to focus on one management accounting tool or industry (Jones, 2004; Collier and Gregory, 1995). The remainder of the work was conducted using either a postal or web based survey. Much of the work consulted used UK, USA, Australia and New Zealand in varying degrees (Drury et al, 1993; Chenhall and Langfield-Smith, 1998; Guilding et al, 2000; Yazdifar and Askarany, 2010). A number of studies

considered the diffusion of management accounting practices in other countries such as China, Japan, Italy, Greece Finland, Malaysia, India etc.

Clearly apparent from the empirical research is the nature of the organisations contained in the studies. 36% of the studies were exclusively carried out in the manufacturing sector of countries with a further 36% studies being conducted on a variety of sectors though in many cases the proportion of service sector firms was small.

In terms of representation for service sector firms Ross and Kovachev's 2009 survey which was made up of 50% service sector, Yazdifar and Askarany's 2010 survey which was 65% service sector, and McLellan and Moustafa's 2011 survey where 80% of the firms were service sector but related to the Gulf state area only are the only evidence of wide scale surveys of traditional and contemporary practice where significant evidence relates to the service sector though no distinctions are drawn between the sectors in the analysis and therefore it is difficult to conclude the link between the sector and the tools used.

In contrast all bar two of the case study work related to service organisations but on the whole these were restricted to the financial services or leisure sectors.

Only one Auzair and Langfield-Smith's 2005 survey was wide spread and only related to service organisations but this was purely researching management control systems and not the wider management accounting tools that this work considers.

From this review it is clear that there is as suggested by previous literature a gap in the empirical research on traditional and contemporary management accounting tools in relation to service sector organisations, and as such there is a clear need for the empirical research conducted in this study.

The majority of the work (73%) either evaluated the use of SMA or traditional and contemporary tools with the remainder focusing on a specific tool or issue. In evaluating the main findings of the research without exceptions the results of the work indicated that whilst there was clear usage of the contemporary

techniques there was a very strong adoption and maintenance of those tools that have been considered traditional in this study.

This outcome gives rise to a second of the research points of this study which is if the contemporary tools have been designed for the modern business environment of businesses particularly those in the manufacturing sector it is surprising that there is not more wide scale use and therefore an investigation of the reasons for the lack of adoption are required in relation to service sector organisations.

Finally as discussed in the previous section there is clear evidence from these empirical results of a distinction between what is taught and researched academically and what is likely to be undertaken in practice and hence demonstrates the continued theory practice gap in management accounting.

2.8 Management Accounting Change

Many academics agree that management accounting change has become a topic of much debate. Akbar (2010) suggests that the profile and importance of management accounting systems and practices in organisations has increased resulting in a persistent call for change. Burns and Scapens (2000) were very clear that whether management accounting has changed, should change or has not changed has all been debated.

There is clear evidence from the review of the literature that in the years since Johnson and Kaplan (1987) wrote their book there have been a number of innovations and changes to existing management accounting practices developed.

It has been argued (Akbar, 2010) that internal and external organisational changes such as information technology advancements, more competitive and customer driven markets, changes in organisational structures and new management practices, have had a direct impact on management accounting practices (Lapsley and Pettigrew, 1994; Ezzamel et al, 1996). They further suggest that management accounting practices should be analysed in the

context of the internal and external business environment. Studies by some academics (Haldma and Laats, 2002, Libby and Waterhouse, 1996) found that the above factors had a direct correlation to the design of the management accounting systems. Mia and Patiar, (2001) identify that industry has an effect on the types and ranges of accounting practices and compares manufacturing to service providers in this context. This was also apparent in Sharma's 2000 study where he found that contemporary practices had more perceived benefit for non-manufacturing organisations.

Some of the empirical evidence (Drury et al, 1993; Burns et al, 1999) suggests that the management accounting systems and practices have not changed; however, other researchers have found changes in the systems and processes resulting from implementation of contemporary tools (Wijewardena and De Zoysa, 1999).

The evidence over time suggests that many organisations are yet to make any substantial alterations to their management accounting systems in respect of adopting contemporary tools as Burns and Vaivio (2001) suggest the adoption of an entirely new technique may cause significant problems for an organisation. Shields (1998) in his review of management accounting change across Europe and his review of the literature and empirical evidence at that point concluded that change was limited to the introduction of new terminology and also to a small number of techniques applied to selected products or organisational units. Even the most up to date surveys (Clinton and White, 2012, Ross and Kovachev, 2009) demonstrate the dominance of traditional tools and continue to support the view of Shields.

Burns and Vaivio (2001) seek to evaluate different perspectives of change which they believe should be considered in terms of research into management accounting change. They discuss the epistemological nature of change and whether what appears to be change really is change together with the dichotomy of change and stability. They also discuss the logic of change in terms of whether management accounting change is logically planned or evolves as a result of organisational drift. Their final perspective is that of the

management of change where they surmise that management accounting change may be centrally driven or locally driven.

Over time academics have developed models and frameworks in order to aid understanding of management accounting change in organisations. Burns and Scapens (2000) developed a framework based on institutional theory considering rules and routines linking institution to action, to form a process for management accounting change. They focus on the ways in which rules and routines exist in organisations and how the nature of these combined with the behaviour and relationships within groups in the organisation shape the process of change. They suggest that "management accounting change which is consistent with the existing routines and institutions will be easier to achieve than change which challenges those routines and institutions" (Burns and Scapens, 2000:12). They suggest the framework should be used in interpretive case studies for focusing on the fundamental characteristics of change.

Lukka (2007) drew on the framework of Burns and Scapens considering both the change and stability of management accounting systems over time and the formal and informal domains of organisational life. Lukka goes someway to extend Burns and Scapens work to consider informal routines which move towards the use of structuration theory (see chapter 4 Section 10.4). Lukka concludes that it is possible to have both change and stability in management accounting systems at a point in time.

Baines and Langfield-Smith (2003) developed a contingency led approach to management accounting change linking changes in management accounting systems and organisational variables to environmental changes. Their conclusions suggest that successful organisations are changing their strategies in line with environmental changes but could find no direct relationship between them and advanced management accounting practices.

Modell (2007) identifies different strands of research separating detailed work on individual techniques and the broad understanding of why and how change occurs. Modell considers Innes and Mitchell's 1990 work based on case studies where they developed a model of factors which was subsequently refined by

Kasurinen (2002) and also used by Cobb et al in 1995 to investigate management accounting change in a bank.

Sulaiman and Mitchell (2005) developed a typology splitting management accounting change into five groups; new techniques which either replace or are added alongside existing ones, modifications to existing techniques in terms of output or operation and the wholescale removal of existing techniques. They conclude that from their study modification of existing techniques is likely to be preferred in organisations. Chanegrih (2008) replicated Sulaiman and Mitchells work and concluded similar results in that change is likely to be incremental in nature following an evolutional rather than revolution path.

Ax and Bjornenak (2007) discuss the contemporary approaches to management accounting as innovations and evaluated why some innovations diffuse and others do not which can be viewed from a demand side or adopter perspective and a supply side perspective which shows how agents propagate innovations. On the supply side Abrahamson (1991) developed a matrix of four elements showing why innovation would occur. The first is efficient choice which is made on the basis that there are benefits to be gained from the adoption of the innovations. The second is forced selection by either government or parent company. The third is fashion agents such as consultants who will promote certain innovations irrespective of whether there are benefits for the adopter. Finally is fad where the innovation is adopted for legitimacy reasons above rational ones. Malmi, (1999) and Bjornenak, (1997) both used this framework to evaluate ABC in their respective countries.

Bjornenak and Olson (1999) chose to look at the contemporary tools as models and developed a conceptual approach to analyse them. They suggest by doing this it is possible to understand the main story about innovations, what is really new or just repackaged and similarities between the innovations. Using their model they were able to conclude that “contemporary management accounting models seem to be in conflict with conventional wisdom” (Bjornenak and Olson, 1999:335).

Other academics have studied the changing role of the management accountant in organisations such as Evans et al, (1996), Burns and Yazdifar, (2001), Ezzamel et al, (2003) and Yazdifar and Tsamenyi, (2005). The changing role of the management accountant is outside of the scope of this thesis.

2.9 Theory Practice Gap

The theory practice gap in management accounting has been well documented over time (Scapens, 1984, 1994; Malmi and Granlund, 2009; Kaplan, 2011) and can be evidenced through the empirical research reviewed in this study (Drury et al, 1993, Sharma, 2000, Tan et al, 2004). The gap can be split into two themes the education-practice gap and the research-practice gap (MacDonald and Richardson, 2011).

In relation to the education-practice gap, Johnson and Kaplan's 1987 work in their recollection of history highlights the content of management accounting text books as reflecting the stagnation of management accounting and Scapens 1994 research found "a clear gap between the theoretical material in textbooks which was intended to show practitioners how management accounting should be done, and the actual practices of management accountants in both UK and US companies" Scapens 1994:302). Scapens and Johnson and Kaplan clearly called at the time for academics to conduct research which studied management accounting practice and Kaplan (1984) in particular heralded the use of the case study method, he also criticised accounting academics for placing too much emphasis on economic models and not enough on real companies. Tan et al (2004) reflect that some academics argued that it may be the fault of the practitioners rather than the academics suggesting that they were not using the techniques as they had been taught (Horngren, 1989). Horngren goes on to further suggest that "'failure to use techniques in practice does not necessarily mean that their teaching is unjustified" (1989:22).

Research conducted by Dugdale (1994) and Tan et al (2004) attempts to compare the views of academics and practitioners as to the value of traditional

and contemporary techniques. Each of these studies found a distinction between the academic view point and that of practice with respect to the importance of the techniques. Tan et al's study showed the top four important topics considered by practitioners were traditional (cash flow management, operational budgeting, variance analysis, and performance evaluation); whilst educators agreed that performance evaluation was important they also included ABC in their top four. Tan et al conclude that the discrepancy between educators and practitioners in this case could be "driven by differences in perspectives concerning the current and future usefulness of traditional and contemporary topics" (2004:64). Edwards and Emmanuel's 1990 study demonstrated that academics focused on organisational and societal issues whilst practitioners were concerned with the technical aspects of management accounting. MacDonald and Richardson (2011) in investigating the education-practice gap undertook an historical longitudinal analysis over the period 1967-1997. Whilst it was apparent that there was a lag which was getting larger between innovations appearing in textbooks relative to professional literature this does not give evidence of the actual use of innovations by practitioners.

The research-practice gap is purported by academics to have become apparent in the mid 1900's following the transference of accounting academe into social sciences at universities (Macdonald and Richardson 2011; Scapens 1983), leading academics away from practice and towards research questions which could be answered with a narrow research methodology (Kaplan, 2011). Pfeffer (2007) believes the gap has widened over the last 50 years.

Following the call of Scapens (1984) and Kaplan (1984) for more practice oriented research the empirical literature as can be evidenced from the contents of Appendix 2 has been substantial however this research reflects the adoption of management accounting tools and techniques in practice and does not provide any insights to aid practitioners. This is a view supported by balvinsdottir et al, (2010) who suggest that though management accounting has become an innovative practice researchers do not appear to have an interest in influencing practice.

A further review of management accounting research and how its development over time has shaped this research will be provided in chapter 4.

2.10 Chapter Summary

This chapter has reviewed the development of management accounting over time and has commented on the popularity and development of both traditional and contemporary tools of management accounting. It has considered the "relevance lost" debate and has reviewed the extensive empirical evidence of the use of contemporary and traditional tools in practice.

In reviewing the literature the following conclusions have been drawn in respect of justifying the empirical work conducted in this thesis, namely;

There is a lack of empirical evidence of the use of traditional and contemporary practices in an exclusive service sector setting.

There is clear evidence of a slow take up of contemporary approaches and widespread use of traditional tools, this work intends to establish whether this can be observed in a pure service sector evaluation.

There is a lack of empirical evidence examining the factors influencing the adoption of contemporary approaches and it is an objective of this study to examine these factors, in a service sector context, and in doing so also investigates the extent of the theory practice gap in relation to service sector organisations.

Chapter Three: Service sector context

3.1 Introduction

The aim of this chapter is to give an insight into the development of the service sector as part of the UK economy and to provide an exploration into the literature surrounding the nature and characteristics of service organisations.

3.2 Service: a definition

A service is most commonly described as what it is not. Quinn and Gagnon, (1986) describe services as economic activities which neither, produce a product, nor a construction and are therefore intangible. Bowen and Ford, (2002) argue that the issue of the term intangible product to describe a service is misleading as the range of services is vast.

Jones (2013:1) states that "service industries comprise businesses whose principal activity (the activity contributing the most to the unit's total value added) is to provide service products". Under European definitions: "Service products are entities over which ownership rights cannot be established. They cannot be traded separately from their production" (Eurostat, 2009, p. 2).

3.3 Economy

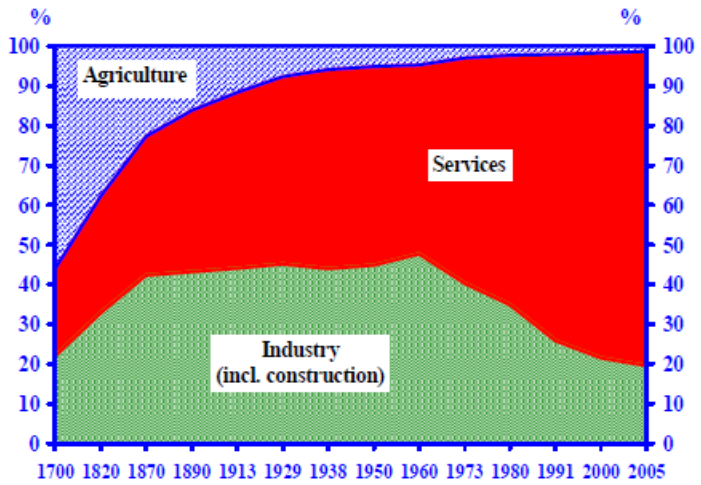
The structure of the UK economy is continuously evolving. The long-term view has been of a gradual shift from industry and manufacturing to service over a period of three hundred years (Lam, 2013).

The UK economy can be analysed in relation to its sectors in this study the structure of the economy can be examined in relation to three sectors Primary Sector (agriculture) Secondary Sector (Manufacturing) and Tertiary Sector (service).

The changes to structure of the economy can be examined in a number of ways there are two main methods; firstly by considering output or contribution to

Gross Domestic Product (GDP) and secondly by employment. Figure 3.1 below shows the shift in the share of employment of the sectors between 1700 and 2005.

Figure 3.1: % of people employed per sector



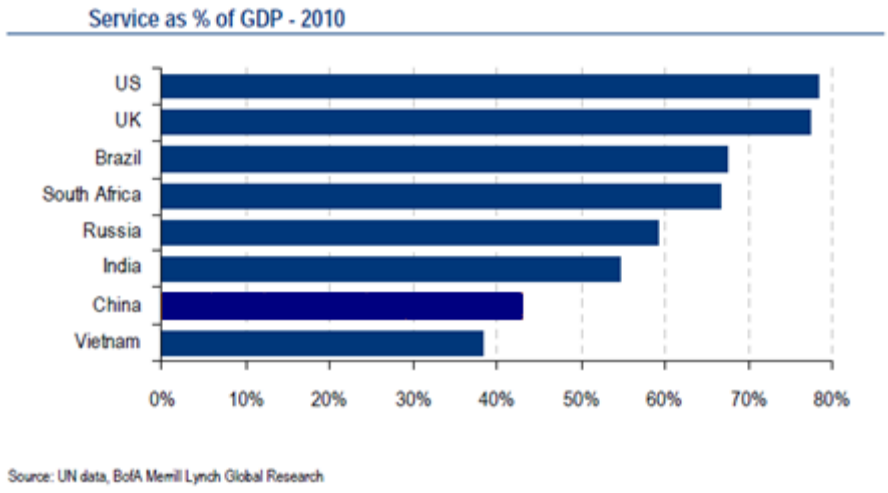
Source: Maddison/OEF, cited by Colquhoun, 2005:9

In 1700 services accounted for approximately 20% of UK employment. There was a substantial growth by 1870 to 40% the 1861 census recorded 25% of those employed were in professional, domestic and commercial activities that we later reclassified as service activities (Brook, 2008). Brook (2008) goes on to comment that services were mainly divided between 'learned' professionals such as legal and education professions and domestic services but that transport and retail services were also present.

By the late 1960s there was a significant decline in industry employment so that by 2005 the service sector of the UK accounted for approximately 80% of employment (Colquhoun, 2005) and by 2012 this had increased to 85% (Jones 2013).

If analysed from the perspective of GDP the picture of change is corroborated and is mirrored in other developed countries around the world. Figure 3.2 below shows the percentage of GDP accounted for by the service sector of a number of countries around the world in 2010 (Cui, 2011). The UK service GDP has remained fairly stable at just below 80% of the total.

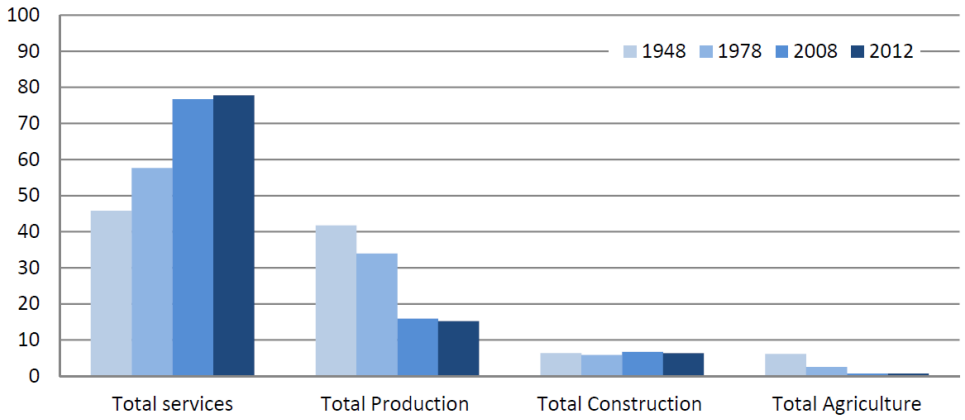
Figure 3.2: Service as a % of GDP per Country



According to Colquhoun (2005) there is no reason to expect the decline in manufacturing relative to service to continue. He cites data provided by Oxford Economic Forecasting which suggests that agriculture and manufacturing combined will be no greater than 20% of output by 2015.

Brook (2008) used a variety of different sources and statistics to provide a measurement of the size of the service sector in 2005 all of which support the previous findings about the relative size of the sector. Drew and Morgan (2007) chart the development of the Index of Service (IoS) to increase the ability to accurately measure the output of the service sector. Jones (2013) indicates that services now contribute more to the UK economy that any other industry growing from 46% in 1948 to 78% in 2012 as per figure 3.3 below.

Figure 3.3: UK GDP industry weights (%) 1948-2012



Source: Jones (2013:9)

The growth in the service sector and decline of manufacturing can be attributed to a number of key events since World War II. Lam (2013) suggests that since 1964 there has been a changing pattern of employment, which is borne out by the data from figure 3.1 above. Lam adds to the argument that general rises in income and consumer demand have led to shifts from goods to services and the increase in public sector services helped to contribute to the growth in the service sector. Tilly (2006) attributes some of the growth to the fact that there are only so many products that can be consumed and the increase in the range of services that can be bought. The manner of consumption has changed so that more food is consumed in restaurants rather than at home and music is bought over the internet rather than on CD's. Tilly provides data to support this showing that by 2000 half of consumer spending was on services whereas 40 years earlier only 30% was on services.

A further factor in the growth of the service sector cited by Griffiths and Wall (2012) is that of North Sea oil and gas which have increased the service sector and seen the demise of extractive industries such as coal. Lam (2013) purports however that North Sea Oil cannot be wholly blamed for industrial demise since the structural changes reflecting the size of the sectors started earlier than the late 70's (1978) when North Sea oil came to prominence.

Lam (2013) also mentions that the decline of British industry (manufacturing) was partially due to the growth of the non-marketed public sector.

Lee (1996) suggests that service sector productivity has increased at an annual rate of between 2 and 4%. Some of this he attributes to the ability to reduce the level of the workforce but also by increasing the per capita output of an expanding workforce as in financial services. Many of the UKs major financial services companies reflect this increase by the ability to compete successfully internationally as markets have changed. Brook (2009) shares this view providing data clearly showing the productivity of finance, real estate, renting and other business activities to be the highest.

Tilly (2006) cites improvements in technology, which we have noted as an impetus for management accounting change to have an impact on the move from manufacturing to services. He suggests that outsourcing of various service functions, which would have been provided in house are now being provided by bespoke service providers, and supports the view of Griffiths and Wall (2012) who show the relative importance of communication and financial services to the growth of the sector.

Brook (2009) provides evidence that the level of investment in research and development (R&D) and innovation of service organisations was in excess of their manufacturing counterparts. Investment was five times higher in 2006, while in 2007 research and development expenditure by service organisations accounted for over 60% of total UK R&D.

There are those who suggest that the UK has become a 'post-industrial' economy (Lam, 2013, Griffiths & Wall, 2012), meaning that information handling activities are dominant in the economy.

3.4 Classification

Jones (2013) confirms the above analysis and states that services have changed over time and that the industry classification has also had to change to keep pace, it has changed 7 times since 1948. The hierarchical index acts as a

framework which is necessary to chart statistics and to examine trends and growth over time. In the UK Standard Industrial Classification of Economic Activities (UKSIC), which aligned to international classifications, is used to classify industries.

As of 2007 when the last change was made the classifications were as follows:

Table 3.1: UKSIC sections included in the classification

Components of the Service Industries as Represented in the Index of Services	UK SIC Section
Wholesale and retail trade; repair of motor vehicles and motorbikes	**G**
Transportation and storage	**H**
Accommodation and food service activities	**I**
Information and communication	**J**
Financial and insurance activities	**K**
Real estate activities	**L**
Professional, scientific and technical activities	**M**
Administrative and support services activities	**N**
Public administration and defence; compulsory social security	**O**
Education	**P**
Human health and social work activities	**Q**
Arts, entertainment and recreation	**R**
Other service activities	**S**
Activities as households as employers	**T**

Source: Jones (2013:3)

As many business organisations have more than one activity, supermarkets for example now sell a wide range of products and provide banking, telecommunications and insurance services. In these instances the classifications are bound to the main business activity of the organisation (Jones, 2013).

A further classification exists of service industries devised by the World Trade Organisation (WTO) in 1991 whilst the categories are very similar there is more detail and for the purposes of this study it was possible to get a better match to

the actual organisations that completed the survey. Full details of the WTO classification can be found in Appendix 3.

Heineke and Davies, (2007) explore the evolution of services and suggest that as an economy develops different types of service evolve: see Table 3.2.

Table 3.2: The change in emphasis on types of services in an economy

Infrastructure services

↓

Support services

↓

Recreational and leisure services

↓

Education services

↓

Time saving services

↓

The service experience

↓

Information services

Adapted from Heineke and Davies (2007:366)

Heineke and Davies suggest that infrastructure services would include transportation, education and healthcare, as the economy develops support services emerge which includes financial services, retail and leisure and tourism services. Further recreational and leisure services then emerge as standards of living improve. Education services particularly higher education evolves as increasing levels of skill, literacy and numeracy are demanded of employees. In order to maintain standards of living, longer hours are worked so time saving services are introduced such as childcare and on-line shopping. Customers become more demanding of the services they receive and expect a more memorable experience and they are willing to pay more for the value that is added to the service, Heineke and Davies give Disney as an example of an organisation which adds value to the service experience. Finally the use of IT and the internet has further allowed services to expand by providing better information to customers.

3.5 Typologies

Chase and Apte (2007) suggests that the ability to utilise a typology of services allows a better understanding of both strategic and operational challenges that service organisations face. A service typology allows connections between multiple variables to be used to contribute towards service initiatives, in this respect they are more than simple classifications. To that end a number of academics have attempted to classify service organisations from observation using typologies.

Schmenner (1986) developed a matrix classification from identifying that that there are two key characteristics of service businesses, which are the degree of labour intensity and customer interaction and customisation. From this he was able to categorise the businesses in to service factory, service shop, mass service and professional service. See Figure 3.4 below.

Figure 3.4: The Service Process Matrix

	Degree of interaction and Customisation	
	Low	High
Degree of Labour Intensity: Low	**Service Factories:** - Airlines - Trucking - Hotels - Resorts and Recreation	**Service Shops:** - Hospital - Auto Repair - Other Repair Service
Degree of Labour Intensity: High	**Mass Service:** - Retailing - Wholesaling - Schools - Retail Aspects of Commercial Banking	**Professional Service:** - Doctors - Lawyers - Accountants - Architects

Source: Schmenner (1986:25)

Silvestro et al (1992) proposed a typology of service organisations using data from 11 case studies of for profit service organisations. Silvestro et al used

literature from the service operations area to draw six dimensional characteristics of service which Auzair and Langfield-Smith, (2005) suggest are now widely recognised and used in service operations literature.

The six dimensions are (Adapted from Silvestro et al, 1992):

Equipment/people based services – equipment based service requires the use of equipment or assets to provide the service such as transport providers like airlines or trains. Whilst people based services use the expertise of people to undertake the service such as accountants and hairdressers. Thomas (1978) used this as a basis for classifying businesses within a hierarchy. He recognised that many service providers will move between the equipment and people orientation and that these will be mainly multi service providers.

Length of customer contact time – based on the work of Chase (1978) who used a continuum from low to high to record the level of engagement with the customer, a computer consultant will have a high degree of engagement with a client whereas a delivery service will not.

Extent of customisation – customization involves compiling an individual service for each customer as the computer consultant would do, other services are more standardised such as retail stores who stock standard goods for consumption.

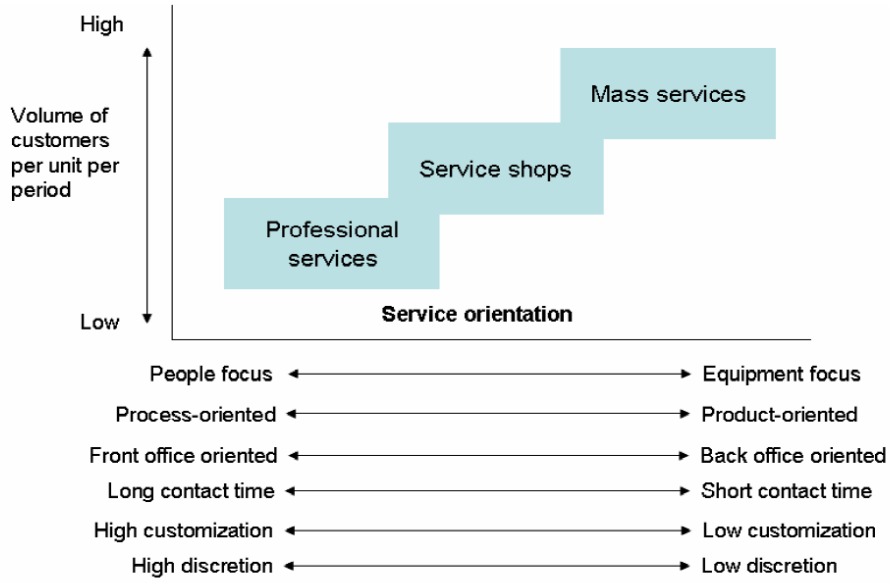
Extent of discretion – This refers to whether front end staff are able to customise the service to the client without referring to management.

Value added front or back office – where are the majority of the staff based are they customer facing or back office.

Product/process focus – a product focused service is where there is a focus on what the customer buys whereas in a process focused service it is how the customer buys.

From the six dimensions they were then able to propose three archetypes of service very similar to that produced by Schmenner (1986) which were; professional services, mass services and service shops. The matrix can be seen from Figure 3.5 below.

Figure 3.5: Model of service process



Source: Vos (2010:18) (adapted from Silvestro et al, 1992)

Lovelock (1983) identified that service industries were dominated by an operations orientation which suggested that each service industry was different and therefore it would be difficult to compare practices across industries. Silvestro et al (1992) suggest that a classification of services by process allows the ability to cross industry boundaries and gain an understanding of management methods and techniques which may be appropriate to each service type.

Gluckler and Hammer (2011) in examining German service sector organisations suggest that three distinct aspects of service emerge with which it is possible to classify organisations they are the demand orientation, knowledge intensity and technology intensity. They further expand these by adding eight theoretical service types based on the combination of the three aspects. They were able to empirically observe five of these types in their research.

Hipp and Grupp (2005) used an innovation typology developed by Soete and Miozzo (1989) to show innovative behaviour in service organisations and used the typologies of knowledge intensity, network basis and scale intensity which

was relative to the degree of standardisation. They found the typology to be well supported in their German based study.

3.6 Characteristics

It is the characteristics of service organisations that make them different to manufacturing organisations which has particular relevance for management accounting. Modell (1996) cites a preoccupation with manufacturing and finding criteria on which to differentiate manufacturing and service organisations as reasons why management accounting research and also management accounting text books fail to address the needs of service providers.

Fitzgerald et al (1991) suggest that there are five characteristics which distinguish service organisations. Verma and Young (2000) suggest that there are three main ones which are similar to Fitzgerald et al's observations.

The first unique characteristic of service organisations is the interaction with the customer. The customer is present and also participates directly in the service delivery process. Brignall (1997) suggests that this may pose particular threats and opportunities for the management of services. Botta-Genoulaz and Millet (2006) add that the degree of customer contact as per the typologies above make service operations more complex.

The second characteristic is the intangibility of the service product, since the service may be made up of more than one aspect it becomes difficult to judge customer value, in a hotel for example which aspect of the service does the customer value: the room; the food; the cleanliness; the attitude of the staff etc. Pine and Gilmore (1999) sum this up as all aspects which come together to create a memorable experience for the customer including the service product (hotel room), service setting (location) and service delivery (courteous and efficient staff).

Services are heterogeneous; this represents the uniqueness of the service and is tied very closely with the degree of labour intensity of the service. Some service providers are able (or want to) standardise, in that respect the service

product becomes similar to that of a manufacturer. Thomas (1978) suggested that because manufacturing was dominant it has shaped the expectation that any technique applied to manufacturing can be applied to service, Bowen and Ford (2002) in their review of the literature found evidence of many writers arguing that services should adopt a manufacturing approach to providing a service. Ritzer (1993) articulated this in his book the macdonalization of society referring to the standardisation with which this particular service provider is associated. For many service providers the standards and customer perception will vary from day to day and person to person.

The production and consumption of services are simultaneous within a service setting meaning that they cannot be tested for quality before delivery. Fitzgerald et al (1991) suggested that this would also lead to high fixed costs and that flexible budgeting would not be useful for performance evaluation as it supposes many costs are dependent on volume. This also means that services are perishable and cannot be stored as a manufacturer would store finished goods or work in progress. Bowen and Ford (2002) concluded that in this respect production management strategies would need to be different in this environment and require greater ability to manage capacity and demand.

These characteristics have implications of the design and implementation of management accounting systems and tools. Modell (1996) comments specifically on problems of asset valuation as the human assets used by service firms are not easy to value. His work focused on accounting controls and he suggested a framework for research in the area.

3.7 Empirical research

Much of the work in relation to management accounting and service organisations has taken place in performance measurement (Silvestro et al, 1992; Fitzgerald et al, 1991; Brignall and Ballatine, 1996; Ahrens and Chapman, 2002; Hussain and Gunasekaran, 2002a, 2002b; Haktanir and Harris, 2005) in relation to the nature of services, variability of labour and customers in the quality process.

Brignall (1997) conducted research into cost system design and reflected that earlier research showed costing systems of service organisations differed but did not elaborate as to why, whilst the work of Fitzgerald et al (1991) showed different and more complex systems being used in professional services and the least in mass services. Brignall concluded that activity based costing and throughput accounting would be applicable to service organisations but only where the benefit would outweigh the cost particularly in the mass services group. He also suggested that target costing and lifecycle cost management would be more helpful than either activity based costing or throughput accounting. Innes and Mitchell (1997) conducted a detailed review of activity based costing in the largest UK financial institutions and found the tool particularly useful and the adoption rate higher than in other industrial sectors.

Collier and Gregory (1995) is one of the few academic pieces which consider strategic management accounting tools in context through the use of a hotel case study. They suggested that the nature of the service sector made an investigation valuable and also repeated other academics in suggesting that service sector industries were under researched. They concluded that in the hotel sector the finance functions were becoming more involved in strategic management accounting.

Cugini et al (2007) investigated the link between customer satisfaction and strategic cost management in service organisations, they asserted as have others that the nature of service organisations has an effect on the ability to use cost information and greater understanding is needed. They purport that investigating the cost of customer satisfaction is more vital in a service organisation because customer behaviour is usually the determinant of the cost of the service. Their findings highlighted the gap in the SCM literature relating to service organisations. Nielson et al (2000) also identified the relevance of a customer orientated approach in services in particular customer relationship management (CRM) and CPA but found barriers to the use in their study of Danish financial services companies.

Khamalah and Lingaraj (2007) investigated the use of total quality management (TQM) in small service sector businesses in the USA. They found a difference

between perception and implementation of TQM, in that the management appeared to be committed to the idea but that little action had been taken to implement the tool. They found their results to be consistent with results from the manufacturing sector. Also in the area of Quality, Snee and Hoerl (2009) identified the benefit of lean six sigma for service firms using the Bank of America as an example of best practice.

Pricing practices in service organisations has been researched by Avlonitis and Indournas (2006) in relation to organisations in Greece. They concluded that market based pricing was the most widely used with an emphasis on competitors prices.

3.8 Summary

The first part of the analysis catalogues the development and the growth of the service sector in the UK and shows the key reasons for the growth of the service sector. Given the size of the sector and the contribution of the sector to the stability and growth of the economy within the UK it would appear sensible that further investigation is made of service sector firms in a management accounting context.

The development over time of typologies has aided in the classification of services and has aided academics in making sense of practices in service organisations, whilst it is not the intention to rely on the use of any of these typologies in this thesis the ability to view the organisations from the perspective of Silvestro et al's (1991) typology may allow additional evidence to be found.

The review of characteristics and implications for services and management accounting also again demonstrate that the characteristics of services are not like manufacturing organisations and as such an investigation as to the fit of management accounting tools for these organisations is necessary. The review of the research linked to investigating management accounting in service organisations has not been widespread nor does it evaluate the wider use of management accounting tools in a variety of service settings. There is therefore a gap in the literature that this work can bridge.

Chapter Four: Research Methodology

4.1 Introduction

This chapter introduces the research methodology used for this thesis. It sets out the philosophical, methodological and theoretical approaches taken.

In order to explore the topic of the thesis in more detail it is necessary to be clear about the approach taken to the work (Creswell, 2009) and to understand the explicit and implicit assumptions concerning the philosophy of the author, (Burrell and Morgan, 1979). Morgan and Smircich, (1980) suggest that the suitability of the research method, rests on the nature of the social phenomenon to be researched. It is now well established that management accounting can be conceptualised as a social science phenomena and as such a social science perspective will be adopted to shape the methodology of the thesis (Chua, 1986; Hopper and Powell, 1985; Scapens, 2006a).

Burrell and Morgan suggest that it is convenient to conceptualise social science research into four sets of assumptions; ontology, epistemology, human nature and methodology. Tomkins and Groves (1983) suggest that it is a chain, the nature of the phenomenon's reality or its ontology will affect the way in which knowledge can be gained and its epistemology which in turn affects the way in which the research can be conducted I.E. its methodology. Sections 4.4 to 4.5 cover these areas.

The research paradigm and research approach are considered in sections 4.6 to 4.8.

Finally the theoretical framework used for this thesis is considered in sections 4.9 to 4.10 reflecting how it has shaped the research design, data collection and analysis. Firstly a consideration is made of developments in research methodology in the discipline of management accounting. The next section provides the background and discussion in the use of different social theories in accounting research and their relevance for this thesis. The chapter concludes by noting the methodology and theoretical strategies to be followed.

4.2 Ontology

Ontology concerns the very nature of the subject that is to be researched and the perception of reality. At one end of the spectrum there is realism where one believes that the social world is made up of tangible structures which are independent from the individuals living in it, (Burrell and Morgan, 1979, Hopper and Powell, 1985) this would be considered an objective view (Ryan et al, 2002). At the opposite end of the spectrum is a view that the social world is not independent and exists as labels and concepts created by individuals, this is considered the subjective view (Ryan et al, 2002). Morgan and Smircich, (1980) recognised the objective/subjective continuum and identified six ontological assumptions on the continuum each of these are linked to a schools of thought in social science. Cunliffe (2010) reflects that in the 30 years since Morgan and Smircich developed their six ontological assumptions there has been debate over their validity caused by the development of different forms of social theorizing.

4.3 Epistemology

Epistemology relates to the nature of knowledge, That is whether knowledge is real and can be communicated in a tangible form or if the knowledge is more subjective and based on experience and is therefore more individual in nature (Burrell and Morgan, 1979). At one end of the continuum there is a positivist stance which seeks to explain and predict what is happening in society by looking for regulation, causal relationships and by framing hypothesis, at the other end which Burrell and Morgan named anti-positivist the social world can only be understood from the perspective of the individual, and knowledge is subjective rather than objective.

4.4 Human Nature

The assumptions here are concerned with the relationship between human beings and their environment. At the one extreme we may consider human beings as being conditioned by the external environment and their experiences are products of the environment, Burrell and Morgan (1979) show this as deterministic. The opposite extreme they describe as being voluntarist where the human being exhibits free will in controlling and creating their environment. Burrell and Morgan also acknowledge that there is much middle ground thinking between these viewpoints.

4.5 Methodology

The methodology adopted will be shaped by the researcher's standpoint and the assumptions they make on each of the above areas. The ideographic view suggests that one can only understand the social world by getting close to the subject and exploring in detail, which one might do with the use of interviews and case studies. The nomothetic approach relies on hypotheses and scientific rigour and as such surveys and questionnaires are likely to be amongst the research methods used, (Burrell and Morgan 1979).

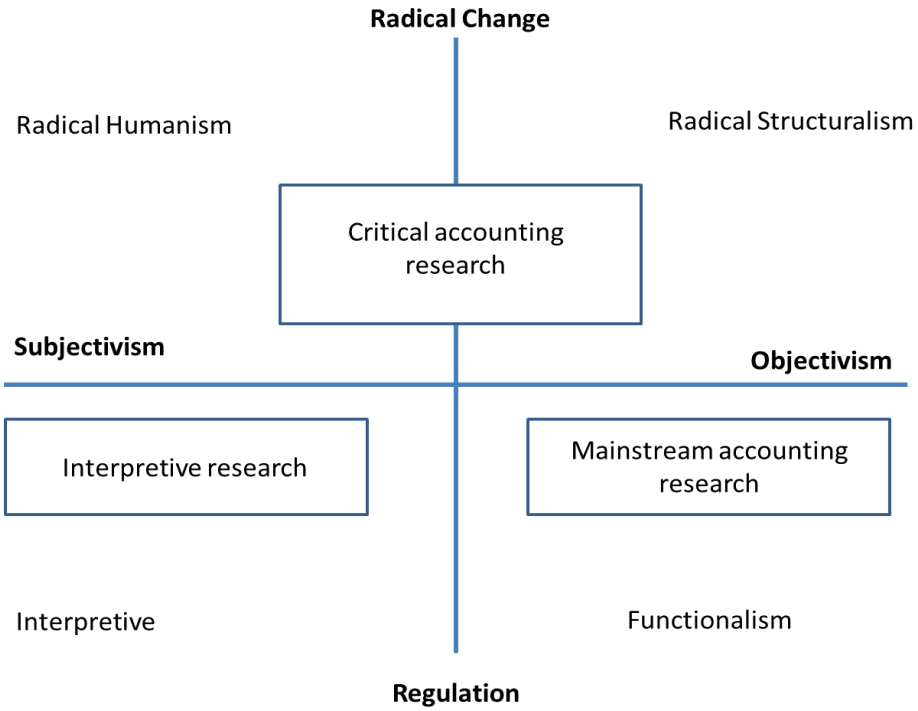
4.6 Research Paradigms

A paradigm may be described as a framework which brings together the key characteristics of the methodology which is to be applied. Ardalan (2003:203) provides the following definition "Paradigms are defined and characterized by a set of fundamental assumptions, which, in turn, translate into certain rules and standards for scientific practice. These are common among the theorists and researchers who share the same paradigm"

Burrell and Morgan (1979) using their continuum of objective/subjective to depict the nature of science, coupled with a second continuum of regulation to radical change, to depict the nature of society, made two dimensions. Within that they created four distinct paradigms of Functionalist, Interpretive, Radical

humanist and Radical structuralist which were mutually exclusive (see figure 4.1 below). This work was then adapted by Hopper and Powell, (1985) in order to give a framework of management accounting research. They suggested three broad groupings of management accounting research which were mainstream and which linked to Burrell and Morgan's functionalist paradigm, Interpretive which linked to Burrell and Morgan's interpretive paradigm and critical research which Hopper and Powell positioned between the radical paradigms of Burrell and Morgan suggesting that there was no need to distinguish between them and resulted in the ability to move along the continuum, (see figure 4.1 below) an approach which was further supported by Gioia and Pitri (1990). Chua (1986) used a similar classification of management accounting research in her paper and also included the ontological and epistemological positions of accounting research (Chua's work is considered again in section 4.9).

Figure 4.1: Paradigms



Source: Ryan et al, (2002:40 adapted from Hopper and Powell, 1985)

Whilst the above work makes use of the two dimensional model many paradigms can be viewed on the one dimensional continuum of objectivity to

subjectivity. Hussey and Hussey (1997), state that the main two philosophies or paradigms on this continuum are positivistic and phenomenological.

4.6.1 Positivistic

The positivistic paradigm was based on the approach used in natural sciences and became absorbed into social science Hussey and Hussey, (1997). Walliman (2011) reports that Comte a nineteenth century philosopher asserted that society could be analysed in exactly the same way as any other scientific field with social laws being discovered through information gained from experience. As a result the positivistic stance has developed a number of key characteristics which are summarised in Table 4.1 with the Phenomenological paradigm. A positivist paradigm is summarised by Guba (1990) as having a realist ontology, an objectivist epistemology and an experimental or hypothesis driven methodology.

4.6.2 Phenomenology

Phenomenology can be seen to be at the opposite end of the continuum to positivistic. Bryman and Bell (2011) reflect that the initial ideas making up this paradigm can be attributed to Schultz. Shultz maintained that the social sciences were different from natural sciences and as such required a different epistemology; in particular he argued that social scientists should gain access to people and interpret their actions and the social world from their point of view. Hussey and Hussey, (1997) suggest that a phenomenological paradigm would have a relativist ontology, a subjective epistemology and a methodology driven by case studies and engagement.

Table 4.1: Characteristics of the Positivist and Phenomenological Philosophies

Positivist	Phenomenological
Reality is external and driven by laws	Reality is socially constructed
Concepts need to be defined and measured	Concepts should incorporate the views of the subjects
Observer must be independent	Observer may be part of what is being observed
Research progresses through hypothesis and deductions from highly specific and precise data	Research progresses through gathering of rich data from which ideas are induced
Produces quantitative data	Produces qualitative data
High reliability and low validity	Low reliability and high validity
Generalises from sample to population	Generalises from one setting to another

(Source: Wisker, 2008; Hussey and Hussey, 1997; Easterby-Smith et al, 2012)

4.6.3 Other paradigms on the continuum

Hussey and Hussey, (1997) suggest that once a researcher has moved away from a positivist approach and closer to the phenomena there are an array of different paradigms which the researcher can use to gain better insights into the research problem they have posed. These paradigms comprise interpretivism, constructivism, postmodernism and critical realism (Guba, 1990; Gill and Johnson, 2010; Hussey and Hussey, 1997; Easterby-Smith et al, 2012; Bryman and Bell, 2011; Wisker, 2008). The definitions, ontologies and epistemologies of the above as interpreted by these authors is often overlapping and has fuelled debate in accounting research (Bisman, 2010).

Laughlin (1995) attempted to address the issue with his model of 'middle range thinking' in which he utilised a three dimensional model categorising change, theory and methodology with three levels for each low, medium and high. In terms of change he considered the extent to which the researcher believes in a high level of change and therefore that society should be changed at the high end or whether the researcher is happy with the status quo at the other. In terms of the researchers attitude to the theory researched is there a high level of theory which can be highly generalised or a low level where it would be difficult to find insights in previous studies. Finally the methodology dimension relates to the current research being undertaken, a high level would depict an objective and observable study whilst at the low end the researcher is involved in the research. From this Laughlin then classified various social theories to the categories. His own preference of using German critical theory and the work of Habermas became the 'mid-range thinking'.

Whilst Laughlin's approach may be appropriate to help the research be viewed through a particular lens it does not cross paradigms.

Bisman (2010) identifies that paradigms which are positivist and interpretivist are valuable in accounting research. Positivist research she argues can provide explanations for accounting phenomena whilst there are interpretivist arguments that there is a multiplicity of other factors to explain the outcomes. The ability to examine the rich data and also be able to make generalisations is appealing in accounting and to this researcher as it reflects the research problem that is to be addressed.

Gioia and Pitri (1990) acknowledge that in producing empirical research the use of one paradigm alone can produce a narrow and incomplete view of the social world under scrutiny and suggest a multi-paradigm approach may be appropriate, this view was further corroborated by Atkinson et al, (1997) in their review of management accounting research at the time suggesting both multi-paradigm and multi-methods.

Bisman (2010:7) also identifies that "studies examining human behaviours in connection to accounting information could benefit from applying multiple or

mixed research methods" and concluded that a paradigm which acknowledged both qualitative and quantitative methodologies was required

This view was taken by this researcher in determining how the research questions and objectives were to be addressed.

4.6.4 Critical Realism

Critical realism is a research paradigm that combines the features of qualitative and quantitative methodologies. Bisman (2010) reflects that there was support for the use of this paradigm in economics and marketing from the early 1990's.

The philosophy of critical realism is linked with the work of philosopher Roy Bhasker, (Walliman, 2011). Bhasker had an integrationist view of the individual and society suggesting that they are mutually interdependent so that individual actions (praxis) are influenced by the society (structure) in which they are enacted but those actions can themselves influence the same society (transformation).

Critical realist ontology is structured and differentiates between the empirical domain which relates to the experience and perceptions of the actors, the actual domain with comprises events and processes and the real domain which considers structures and mechanisms which exist and have consequences for the actors and society, (Easterby-Smith et al. 2012).

Bisman highlights a further characteristic of the approach stating that "critical realism is not dependent upon detailed historical explanations or constrained by a particular theoretical lens" (2010:9). In this respect a number of theories may be consulted in order to find coherence and consensus and that observational results should be considered robust based on their ability to be replicated. In this respect a number of theories relevant to management accounting research have been considered in detail later in this chapter, regardless of the paradigmatic perspective that they are usually associated with in order to give a multidimensional perspective to the outcomes of the research.

A critical realist perspective reflects a 'middle ground' approach to methodology and as such allows the combination of both quantitative and qualitative work which allows for depth and contextual understanding of the data through the qualitative work and the capacity to observe the broader patterns in the data through the quantitative. Bisman also addresses that in accounting research this means that results produced at one stage of the research are subjected to further scrutiny as well as being compared to theoretical foundations.

This approach is again consistent with the research objectives of this thesis and will allow for a research design based on quantitative work to be followed by qualitative work which will further support the reliability of the quantitative data and look for more detailed explanations of the outcomes from the quantitative work.

4.7 Approach to be adopted in this work

Having considered the assumptions of Burrell and Morgan (1979) in relation to the nature of social science, the nature of empirical work in accounting and the variety of paradigms available it is possible to summarise the beliefs and assumptions of this research study as follows:

Ontology: the researcher's view of reality reflects the fact that there is a twofold element in that there are rules and mechanics in accounting and underlying in organisations which shape the way accounting is performed but that there is also free will of the individuals within an organisation to shape the tools that they use. The researcher also believes there is an historical context which shapes human action. In that respect the researchers views are closely aligned with the critical accounting research and also aspects of the critical realism paradigm in terms of the three dimensions.

Epistemology: The researcher's view of knowledge in the perspective of this study is not easy to classify. At the broadest level the researcher views there to be a concrete external knowledge which has been built up over time relating to management accounting tools and techniques but equally in terms of the narrow view of individual actors in individual organisations there is clearly a

personal view based on experience. This mixed view point is important in the context of the work being conducted and thus it lends itself again to the critical realist paradigm.

Human nature: this has been touched upon in the ontological and epistemological discussion above, clearly there is an element of free will in the actors ability to choose which management accounting techniques they use but there are obvious constraints from their environment and these are under particular investigation in this study.

Methodology: in relation to the conflicting nature of the ontology and epistemology a multi-method approach to gathering the data is necessary. A scientific enquiry is required to assess the broad state of knowledge regarding adoption of management accounting techniques in service organisations which can be compared with the literature and prior empirical evidence to draw generalisations but additionally in depth work is required to gain a better understanding from individual actors of the management accounting tools selected for use in their organisations and the factors affecting their choice.

It is clear from the above analysis that this work will broadly follow a critical realist path though it should be appreciated that there is some overlap with the interpretive and critical accounting stances and that the researcher appreciates the interconnectivity of actors, events and structures which is not felt to be part of the critical realist ontology. The researcher is also mindful that a fully realist stance would result in the development rather than the testing of theory, this is not part of the scope of the thesis and it will apply an existing theory to the qualitative empirical data to draw conclusions.

4.8 Research Approach

The research approach to be used is the next stage following the choice of the research paradigm (Saunders et al, 2009). There are two main approaches used deductive or inductive (Bryman and Bell, 2007).

4.8.1 Deductive

A deductive approach is suited to a positivistic methodology and starts with known information to develop a hypothesis. The hypothesis is then tested through empirical scrutiny (Bryman and Bell, 2007). This method begins with the general and moves to the particular (Hussey and Hussey, 1997).

4.8.2 Inductive

An inductive study is one which is developed from the observation of empirical analysis, in this kind of study general inferences are made from particular instances (Hussey and Hussey, 1997).

In order to answer the research questions posed in this thesis it will be necessary to take firstly a deductive approach to finding out the state of management accounting practices in service sector organisations generally and in order to explore the reasons for the findings from the deductive methods it will be necessary to utilise inductive methods to explore the reasons for adoption of management accounting techniques in detail to allow generalisations to be drawn.

4.9 Research Methodology in Management Accounting

Management accounting research can be described as eclectic and diverse (Wanderley and Cullen, 2012). Research in management accounting has developed over time using assumptions linked as all social science is to the nature of social science and of society. Hopper et al, (2001) state that in the period 1930-1970 management accounting research was dominated by economics and in the UK by the work of scholars from the London School of Economics (LSE) who's work on the nature of costs was undertaken using a neoclassical economic framework (Ryan et al, 2002).

It is the neo-classical economic framework which has dominated management accounting not just in research but also in education through textbooks (Scapens, 2006a). The economic framework is based on the assumption that

decision makers are profit maximises and the profit maximising objective is pursued using marginal economic analysis. This resulted in a plethora of quantitative techniques being developed such as cost-volume-profit, learning curves and variance investigation models. Scapens and Arnold (1986) suggested that economic theory played a key role in the development of techniques in all areas of management accounting. A review of literature undertaken by Shields in 1997 showed the majority of management accounting research was still based on economic theory.

The neo-classical framework works with two key assumptions; the first is that the decision maker can arrive at profit maximising decisions using information which has no cost and no uncertainty. The second is that individual decision makers can be isolated and no group decisions are made.

The neo-economic stance can be seen to be firmly rooted in Burrell and Morgan's (1979) framework as functionalist with a positivistic epistemology and deductive reasoning. This then formed the basis for Chua's 1986 definition of mainstream management accounting research.

Mainstream management accounting research follows the neo-classical paradigm but as management accounting academics began to question the assumptions further theories were used and developed, including information economics and behaviour at an individual organisation level, (Ryan et al, 2002). Burns and Scapens (2000) go on to argue that economic approaches whilst they may suggest the techniques do not assist in our understanding of how management accounting techniques come to be used or not.

The period between 1975 and 1985 gave rise to a growth of management accounting research based on organisations and behaviour (Hopper et al, 2001) and the introduction of agency theory and contingency theory in the mainstream management accounting research paradigm.

The introduction of social theory into accounting research developed with the 'relevance lost crisis' in so much as the acceptance of changes in markets, technology and work practice encouraged management accounting researchers

to broaden their analysis and theorise changes using a variety of social science perspectives (Hopper et al, 2001).

The changes in research focus developed the two other paradigms of accounting research namely the interpretive and critical management accounting research.

Interpretive research is concerned with making sense of and understanding the social world. Its ontology is based on reality being socially created and its epistemology is based on subjective interpretation linked to the social actors. Chua (1986) suggests that accounting theory attempts to explain action and understand management accounting as a social practice.

Ryan et al, (2002) suggest that a number of social theories could be used in interpretive studies including structuration theory, institutional theory and the latourian approach. Ryan et al go on to state that the use of interpretivist work gives a deeper and more meaningful context of the management accounting practitioners work, which will allow them to better manage the demands of their role. However a problem of such an approach is that it whilst it gives an understanding of the social process it does not incorporate a programme for social change which can be seen as central to the critical or radical paradigms.

Critical accounting research sits between Burrell and Morgan's (1979) paradigms of radical structuralism – society is shaped by social structure and radical humanism – society is shaped by social actors in line with Hopper and Powell's (1985) view of one radical theories paradigm. Ryan et al suggest that the underpinning is derived from the critical theory school of Habermas and his German colleagues who in turn drew of the work of Hegel and Marx. Wanderley and Cullen (2012) suggest that the work of Foucault can also be used in critical management accounting research.

Research in this area tends to follow a mixed ontology recognising that reality is objective but also that human intention is accepted and that there has to be subjective interpretation. Its epistemology is related to context bound criteria, history and change which need to be considered to understand social objects,

(Chua, 1986). Chua goes on to suggest that accounting theory has a critical role in the identification and removal of domination and ideological practices.

Zimmerman (2001) put forward a case for the superiority of the mainstream functionalist approach based on economic theory suggesting at the time that other epistemological stances in management accounting research lacked empirically tested theories. Zimmerman's paper received a number of criticisms at the time Luft and Shields, (2002) for example suggested that management accounting research needed to be rich and diverse, a view which supports Tomkins and Groves' (1983:373) call for accounting researchers to use different social science approaches to "get closer to the practitioners everyday world". Ryan et al, (2002) suggest that research using the alternative approaches has expanded rapidly over the last 30 years and has helped to reduce the theory practice gap by bringing research closer to practice.

Scapens (2006b) summarises his personal journey and reflects that it broadly represents the trends in management accounting research see table 4.2 below:

Table 4.2: Trends in Management Accounting Research

	Methodology	Theory	Practical Dimension
1970s	Modelling	Economic	What managers should do?
1980s	Positivism	Contingency	What do managers do?
1990s	Interpretivism	Structuration	Making sense of practice
2000s	Pluralism/Pragmatism	Institutional	Helping practitioners

Source: Scapens (2006b:9)

Scapens recognises that whilst his research focuses on institutional theory there is a need to adopt a more pragmatic stance to make "theoretically

informed management accounting research more relevant to management accounting practitioners" (2006b:9).

4.10 Theory and Management Accounting

From the previous section it is clear that in order to progress the various methodologies used in management accounting and to answer empirical research questions it is necessary to also focus on the theories which can inform or interpret practice. This section will consider the main theories which can contribute to management accounting empirical research.

4.10.1 Agency theory

Agency theory developed in the 1970's and was widely used in management accounting research in the 1980's (Kelly and Pratt, 1992). It stems from the economic framework and is linked to the mainstream accounting paradigm.

Agency theory considers that agents within an organisation will seek to maximise their own utility rather than that of the firm and can be used to explain organisational behaviour in terms of maximisation. Kelly and Pratt (1996:230) suggest that whilst it "provides convincing explanations for some behaviour…… it is only selectively convincing and denies the possibility of economically irrational or altruistic behaviour".

4.10.2 Contingency theory

The principle of contingency was pioneered by Woodward in 1965 whilst working on organisational behaviour. It rests on the premise that there is not one best way to structure an organisation in order to achieve optimum results. In the field of management accounting research and in particular the use of management accounting tools in practice it has been used to attempt to show how closely linked practices are with contingent factors of organisations such as size, decentralisation, use of technology etc. (Chenhall and Langfield-Smith,

1998; Abdel-Kader and Luther, 2008). Tilema (2005) reflected that the lack of uptake of sophisticated techniques in practice may depend on the circumstances of the firm and thus the need to adopt a contingency theory perspective.

Covaleski et al (1996:8) in their reflection of contingency theory suggest it has "been criticised for presenting a deterministic, ahistorical view of organisations which produces limited insight as to the mediating processes of organisations". Otley and Berry (1980) observed at that time that a small number of general variables were used to explain the design of management accounting systems.

4.10.3 Institutional theory

A number of different strands of institutional theory exist with the aim of gaining insights into organisational change and these have been extended to consider management accounting change. They include new institutional economics (NIE), new institutional sociology (NIS) and old institutional economics (OIE).

NIE is concerned with the external institutions in the organisational environment (economic social and political) and their effect on organisational practice (DiMaggio and Powell, 1991). DiMaggio and Powell in their analysis suggested that organisations conform to gain legitimacy and increase their probability of survival. Scapens (2006b) suggests that NIE has drawn attention to the economic factors that shape organisations structures, systems and management accounting practices.

NIS attempts to explain why organisations in a particular filed appear similar. It distinguishes between technical (efficiency in operations) and institutional (rules, social norms and expectations) environments. In terms of contemporary management accounting tools such as ABC, Scapens (2006b) suggests it would be useful to consider the technical concerns driving the adoption and also the desire to conform to external expectations.

DiMaggio and Powell, (1991) considered different types of isomorphism (the extent to which one organisation resembles another) and categorised them into

three groups: Coersive (legal/political); Mimetic (copying others); Normative (society and professional bodies).

Using an NIE and NIS approach Granlund and Lukka (1998) produced a framework of drivers of management accounting practice. See Table 4.3 below. They suggested that there was a growing trend towards globalisation of management accounting practices and that future management accounting research should focus on analysing the similarities.

Table 4.3: Drivers of Convergence of Management Accounting Practices.

Factors driving convergence	
Economic Pressures	• Global economic fluctuations/recessions, deregulations of markets. • Increased competition • Advanced production technology • Advanced information technology
Coercive Pressures	• Transnational legislation • Transnational trade agreements • Harmonisation of financial accounting legislation • Transnationals' influence over their subsidiaries • Headquarters influence in general
Normative Pressures	• Management accountants' professionalization • University research and teaching
Mimetic Processes	• Imitation of leading companies practices • Global consultancy industry

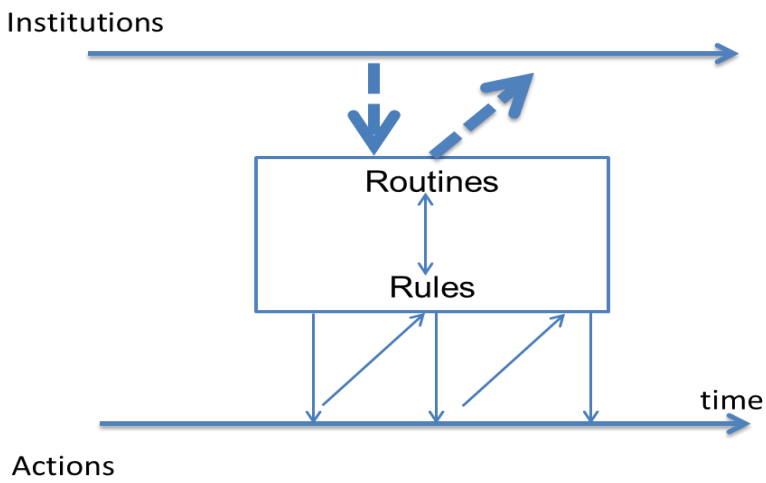
Source: Adapted from Granlund and Lukka (1998:157)

NIE clearly focuses on the economic and together with NIS focuses on external social institutions however it does not give any insight into what is happening internally in individual organisations with regard the influences over management accounting practices, Scapens (2006b).

OIE is designed to look internally at institutions within the organisation to focus on internal pressures which may shape management accounting practice. Whilst NIE and NIS still have links to the classical economic theory that has shaped management accounting research, OIE was built on questioning the classical framework of rationality and recognises that actors' behaviour can be shaped by the organisational institutions, Scapens (2006b).

Burns and Scapens (2000) used the OIE theory in order to develop a framework for studying management accounting change in organisations focusing on the rules and routines that become embedded in shaping the organisation. Their framework which can be seen in Figure 4.2 shows institutions which are the assumptions about the way people behave and at the bottom the actions carried out by individuals in the organisation. In-between are the rules and routines which shape the actions of individuals. Burns and Scapens suggest that individual actors react fairly quickly to changes in rules and routines but it is the institutions which are much slower to react to changes in rules and routines once they have been established though, the institutions have the greater effect on shaping the rules and routines.

Figure 4.2: The Burns and Scapens Framework for Management Accounting Change.



Source: Adapted from Burns and Scapens (2000:9)

Scapens (1994) makes a case for the use of institutional theory over the neoclassical economic theory in evaluating management accounting practices

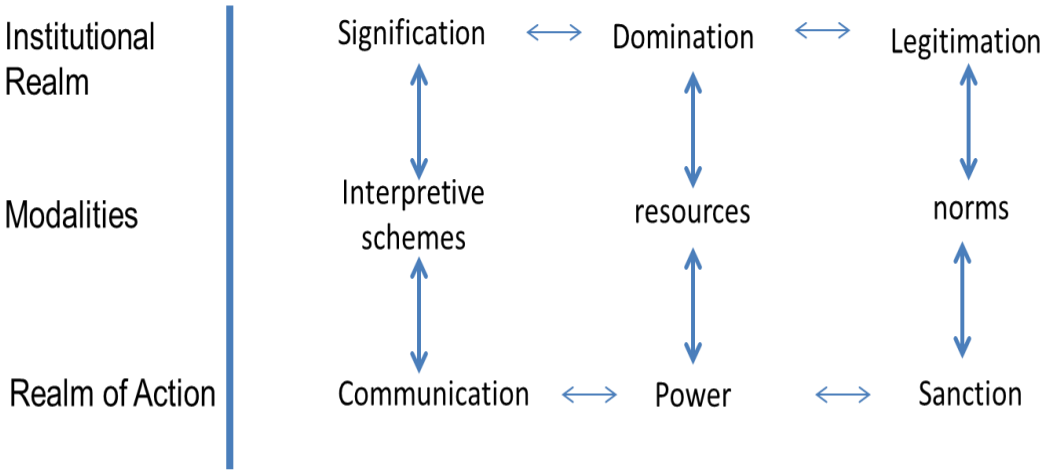
and how they may evolve and change over time. Scapens (1994) and Hopwood (1985) both argued that accounting practices can be seen as institutionalised routines. Scapens reflects that new management accounting practices may be accommodated within the existing institutionalised routines which constitutes evolutionary change but also that new institutions are created as a result of new management accounting practices which is revolutionary change. Scapens concludes his discussion of the use of institutional theory in management accounting practice by highlighting that there are two levels of institutionalisation macro and micro and it is important not to lose sight of the holistic nature of reflecting on management accounting practice as institutionalised routines but also the impact of wider institutional arrangements.

A criticism is made of institutional theory in that it does not show how actions and institutions are recursively related, (Barley and Tolbert, 1997). Barley and Tolbert go on to suggest that in this respect structuration theory has an advantage over institutional theory.

4.10.4 Structuration theory

Structuration theory is based on the work developed by Giddens (1984) and Stones (2005). The main premise of the work relates to the duality of structure between the agency of individuals (to make their own choices) and the social structures (rules and routines). Therefore the structures are “both a product of and constraint on human action” (Barley and Tolbert, 1997:97). Giddens suggests that structures exist because of the routinised nature of human behaviour and hence existing rules can prevail for long periods of time. Giddens model can be seen in Figure 4.3 below. Giddens conception shows how the two realms of action and institution are related. The institutional realm represents three key structures in terms of signification (meaning), legitimation (morality) and domination (power). The realm of action refers to actual arrangements of people, objects and events and shows how they can be influenced by the institutional realm in terms of communication, power and where to sanction and reward behaviour through modalities of interpretive schemes, resources and norms.

Figure 4.3: Giddens Model of Structuration



Source: Barley and Tolbert (1997:97)

Signification is the cognitive dimension; structures are semantic rules which are interpreted as shared knowledge and accumulated skills drawn on to create meaning and for actors to communicate with each other. In terms of management accounting practice this will relate to the existing practices which are used and day to day reports produced and communicated by actors based on the shared knowledge of how the practice works (Macintosh and Scapens, 1991).

The domination dimension contains structures which constrain resources and but also foster co-operation in order to achieve goals. Two types of resources are controlled which are allocative resources (physical goods or even knowledge) also known as artefacts and authoritative resources through the domination over other actors (can be witnessed through chains of command) (Macintosh and Scapens, 1991). In terms of management accounting new tools may be slow to be introduced as the subordinate actors do not have the power to change due to a lack of physical resources and a lack of authority.

The legitimation dimension represents the moral underpinnings or collective consciousness. Agents interact with this dimension through codes of conduct and behaviour is rewarded or penalties imposed for compliance or non-compliance with codes of conduct (Macintosh and Scapens, 1991). In terms of management accounting this can be seen through systems which seek to attract responsibility and accountability to agents and the way the agents react to those norms.

Using Giddens interpretation of routine and change, routine is welcomed by actors and change does not occur easily however there are circumstances or "critical" situations where conventional structures are abandoned and new ones emerge. These may represent instances where changes in the external environment of an organisation may force new accounting tools to be considered and implemented through communication and power of individual actors (Macintosh and Scapens, 1991).

Work in management accounting using structuration theory has developed over time. Scapens together with Roberts (1985) and Macintosh (1990) examined the relationship between accounting practices and structure. Englund and Gerdin (2014) and Englund et al (2011) reviewed the research that had been conducted using structuration theory and comment that accounting researchers have tended to focus on the key elements of structure and not on the agency. They also identified and considered the fact that Giddens original work relies on a flat ontology with no distinction between internal and external structures.

Stones (2001), argues that there is common ground between the critical realism paradigm and structuration theory and Stones (2005) work extends the ontology to give a quadripartite framework which considers four interconnected elements of external structures, internal structures, active agency and outcomes. Figure 4.4 shows Stones framework. Stones termed this work strong structuration theory as its intention was to add to the work of Giddens to provide a current theory of use in empirical work (Jack and Kholeif, 2008). A second underlying feature of Stones work was the notion of position-practices and the understanding that we are not necessarily addressing actors as individuals but

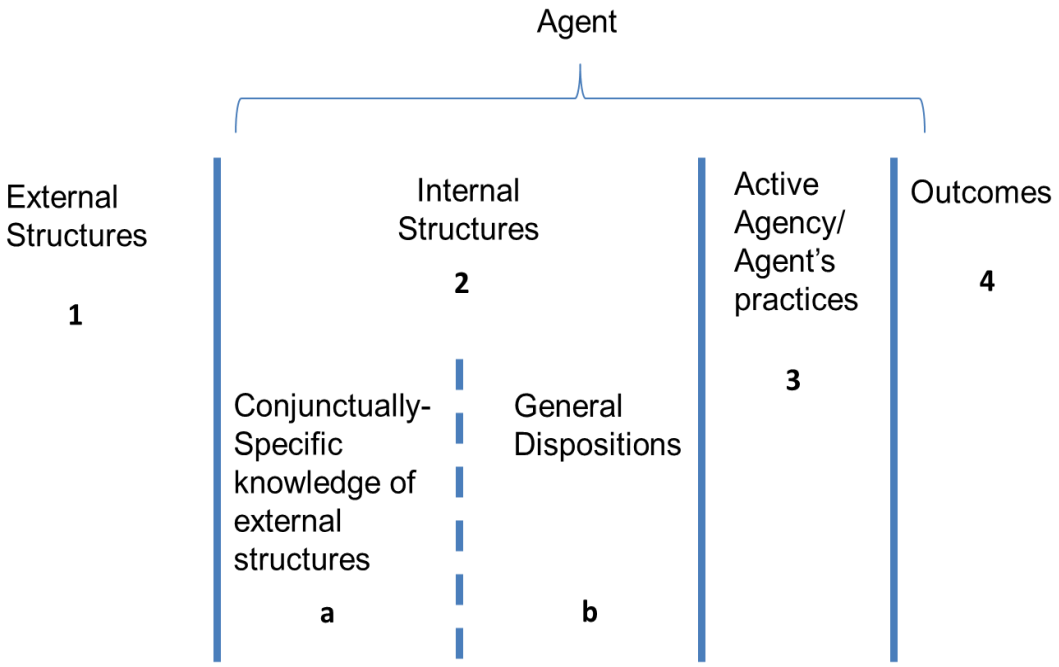
perhaps as groups and even considering the ghosts of past actors and their influence over practice (Jack and Kholeif, 2008).

Stones framework reflects external structure (which we might equate with the macro world relative to the organisation) and its ability to influence the actors. These would relate well to the framework of Granlund and Lukka depicted in table 4.2 above.

Internal structures are separated into two elements. Conjuncturally specific internal structures which link the actor(s) to roles and position practices, in this thesis, that would be the role of the accountant within the organisations and the rules and routines specific to that role. General dispositions are elements that an agent draws on without thinking such as cultural norms or communication skills.

The active agency reflects when the agent in focus acts whilst the fourth component – outcome reflects the result of active agency in terms of whether the internal or external structures have changed.

Figure 4.4: The Quadripartite Nature of Structuration



Source: Stones (2005:85)

Coad and Glyptis (2014) reflect on the changing dynamics of structuration theory in management accounting over time and comment that their view places greater emphasis on the position-practice perspective and considering the role and relations of actors across space and time. Coad and Glyptis go on to discuss the nature of position-practice through its four main elements of praxis (the activity of the agents), positioning (social positions with which the agent identifies), capabilities (how actors make use of practices and resources now and consider the future of practices and resources), and trust (confidence in the reliability of other actors or systems).

Coad et al (2015) whilst acknowledging the shortcomings highlighted by Englund et al (2011) and Englund and Gerdin (2014) suggest that strong structuration theory as advocated by Stones (2005) helps to reconcile some of the problems and in particular can be used to aid understanding of how management accounting practices become established and institutionalised as it recognises that both the technical view of mainstream accounting research steeped in classical economic theory that a practice will be adopted if it is in the economic interest of the organisation, and the social new institutional economic view that there is a strong mimetic link across similar organisations.

They further suggest that viewing organisational fields in relation to position-practice relations can aid in the examining of the diffusion of management accounting practices.

In line with the work of Ansari et al (2010) Coad et al suggest the use of four concepts: prototype versions of practice, the degree of organisational fit, the adaption of practices and evidence of institutional learning.

Busco et al (2007) also reflect on the use of structuration theory as being valuable to overcome the dichotomy of “the complex interactions between management accounting systems and organisational, institutional and contextual factors” (Busco et al, 2007:130).

4.10.5 Critical theory

There are a number of theories which can be discussed under a wide banner or critical or radical theory. The key aim of a critical theorist is to not only understand social processes but to incorporate a programme for change (Ryan et al, 2002).

The labour process perspective is a clear illustration of this point, work by Hopper et al, (1986) showed the link between accounting and finance, the labour process and class relationships. Habermas and the Frankfurt school have also played a key role in developing critical thinking in management accounting particularly influencing those from the University of Sheffield in the 1980's and 1990's such as Tony Lowe and Richard Laughlin (Ryan et al, 2002). Baxter and Chua, (2003) reflects that the work in management accounting using this aspect of critical or radical approach tends to focus on using a platform "for critique, change and improvement within organisations" (2003:100).

Foucault has been considered to be the most influential social theorist integrated in to accounting work (Ryan et al, 2002). Baxter and Chua (2003) suggest that the influence of Foucault has been seen in work looking at history and how particular management accounting techniques emerge. Ryan et al suggest that Miller and O'Leary's 1987 work reflecting how standard costing and budgeting developed to regulate individuals as part of complex social and organisational practices is perhaps the best example of the use of a foucauldian approach in management accounting.

Finally research based on a Latourian approach links accounting with human and non-human actors. The approach is known as actor-network theory (ANT). Management accounting practices are shaped by human and non-human actors and management accounting information is created to serve different purposes within an organisation (Wandeley and Cullen, 2011).

4.11 Chapter Summary

This chapter has considered the main philosophical stances in social science and has explored a number of paradigms for creating a methodology that stem from them.

Having given due consideration to the literature both in social science and reflecting on management accounting research this thesis will broadly follow a critical realist paradigm linked with the interpretivist management accounting literature stance as this provides the best fit with the research questions and objectives of the work.

This chapter has also considered the key methodologies that underpin management accounting and has used the framework developed by Chua (1986) to illustrate the different approaches management accounting research has taken from the classical economic positivistic framework that represents mainstream management accounting research to the interpretive and critical management accounting research.

In considering the methodologies the chapter has also focused on evaluating the theoretical lenses which have emerged in respect to researching management accounting not just from an economic viewpoint but also from a social science perspective. Malmi and Granlund (2009) suggest that the use of theories in management accounting is important for understanding management accounting practices and change.

The economic viewpoint can give the perspective of the technical worth of the management accounting practices considered in this thesis but it cannot give any insight into how and why practices emerge the way they do at an individual organisational level and as such the economic theories will not be used in this study.

To that end for this thesis it is necessary to study management accounting from a sociological and organisational perspective and consider the key theories in this area as a lens.

Institutional theory provides a useful approach to understanding the external factors which influence management accounting convergence through Granlund and Lukka's (1998) framework and internal influences can be examined through Burns and Scapen's 2000 framework of management accounting change.

Extending Burns and Scapens approach, Stones (2005) strong structuration theory allows for excellent insight to be drawn between the actor in focus and the various structures through the use of position-practice and this may also be linked with frameworks which discuss the diffusion of management accounting practices.

In relation to this thesis a strong structuration approach will be taken and the quadripartite framework will be used to evaluate the current position of the case study accountants in service organisations as this framework has evolved to combine the key elements of institutional theory and the agents' position-practice to give a comprehensive framework for rich evaluation.

The next chapter will detail the research methods which will be used in pursuit of this methodology.

Chapter five: Research Method

5.1 Introduction

This chapter will consider the research strategy and the research design given the methodology outlined in chapter 4. It will also consider the research methods which are appropriate by linking these to the research questions and objectives which need to be met.

The research strategy is usually refined into two classifications of quantitative or qualitative (Bryman and Bell, 2011; Walliman, 2011). Walliman goes on to suggest that there is a big distinction between the two in terms of epistemological foundations, characteristics and the types of techniques necessary for their analysis.

A research design provides a framework within which the data can be collected and analysed. There are a number of different types and they can be linked closely with the strategy adopted, (Bryman and Bell, 2011).

The research method is the technique which will be used to collect the data, the method used is relative to the design chosen (Walliman, 2011), so that a case study as a design framework may be conducted using semi-structured interviews.

Following the conclusion laid out in the previous chapter that a critical realist paradigm should be followed to investigate the issue of management accounting practices in service organisations, a strategy built on both qualitative and quantitative approaches including diverse research designs and multiple methods is appropriate (Bisman, 2010).

Atkinson et al, (1997) demonstrate that multi methods can be useful in management accounting research to understand more complex phenomena.

Saunders et al (1997) state several advantages in employing this multi-methods strategy. They are:

(i) the ability to get an overview from the survey data whilst ensuring the most important points are raised through the use of case study material.

(ii) to enable triangulation within the research, this means that each different piece of research can be corroborated to ensure consistency and of the minimisation of bias.

5.2 Research Strategies: quantitative and qualitative

Quantitative research has historically been linked with natural sciences and the positivist philosophy (Walliman, 2011) it is a deductive approach with an emphasis on testing theories and views social reality as external and objective (Bryman and Bell, 2011).

Qualitative research however is linked with an inductive approach with an emphasis on generating theories and is linked with the subjective philosophies such as interpretivism as such it views social reality as constantly changing in relation to individual's perceptions (Bryman and Bell, 2011). It became popular when the problems of using quantitative data to measure subjective human feelings became apparent, (Walliman, 2011).

It is clear from the methodological textbooks that whilst a distinction can be drawn between the two strategies they are not mutually exclusive and the two can be combined within one overall research project, (Bryman and Bell, 2011; Walliman 2011)

Indeed the critical realist paradigm selected does not distinguish between the use of the qualitative and quantitative strategies (Healy and Perry, 2000) in terms of researching the underlying mechanisms that drive actions and events.

5.3 Research Design

The choice of research design reflects the overall strategy to gather the information required. Kornhauser and Lazarfeld (as cited by Ghauri and

Gronhaug, 2010) stated that the research design was the ‘master technique’ whilst the method of analysis of the data collected was the ‘servant technique’.

Ghauri and Gronhaug go on to reflect that design errors occur frequently where due consideration has not been given to the time and resources required to complete research and also ensuring the correct methods are used.

Academics vary in their identification of research designs but they generally include: experimental design; cross-sectional design; longitudinal design; case study design; comparative design.

In the context of this thesis there is not one dominant design the work will contain an element of cross-sectional and case study designs these will now be discussed in more detail below.

5.3.1 Cross-sectional design

Bryman and Bell, (2011) observe that cross-sectional design is often referred to as social survey design, though it generally encompasses more research methods than would be expected in a social survey design.

A cross-sectional design has a number of characteristics which mean that it will usually include more than one case, data will be collected at a single point in time and there will be an element of standardisation in order to gauge variability.

Any methods used under this design format must be able to stand up to the tests of reliability, replication and validity.

Cross-sectional design is usually placed within a quantitative research strategy though qualitative data can also be considered and makes an effective form of validity testing through interviews which follow up a survey and Bryman and Bell suggest that this approach is common in business and management research and as such cross-sectional studies in business and management tend to contain both quantitative and qualitative methods.

5.3.2 Case study design

A case study design tends to relate to the use of a single case study which could be based on a single organisation, a single person or even a single event. Case study designs tend to favour a qualitative strategy as observation and unstructured interviews tend to provide for a detailed examination of a case, (Bryman and Ball, (2011).

Yin (2014) maintains that case study work is able to stand up to the tests of reliability, replicability and validity. Though external validity, and ability to generalise is difficult with an individual case study.

Yin (2014) also identifies a number of different types of case which include: the critical case; the unique case; the revelatory case; the representative case and the longitudinal case. Lee et al (2007) suggest that Yins classifications are narrow and do not deviate very far from a positivist perspective. Ryan et al, (2002) provide alternative descriptions for case studies and demonstrate how they can be used in both a positive and interpretive way.

Bryman and Bell (2011), suggest that multiple-case study designs have also become more popular and could be considered under the comparative design framework as the intention is to compare the data found in the range of cases. They further postulate that one might ask what the difference is between a multiple case design and a cross-sectional design and conclude that it is the focus, if the focus is the unique context of each case then it should be considered a multi-case design and if the focus is on producing general findings it is better viewed as a cross-sectional design.

Ryan et al, (2002) state that case study research was gaining acceptance as an appropriate research design in accounting studies which can also be borne out by the review of the empirical literature relating to management accounting practices conducted in chapter two.

5.3.3 Research design approach of this thesis

As a result of the analysis above and the research questions associated with this thesis it can be ascertained that this work will follow a cross-sectional design which will also contain an element of multiple-case design within its general focus.

5.4 Research methods

Having arrived at a broad framework for design it is necessary to consider the methods which will be used to gather the information required in order to answer the research questions successfully.

The main methods used in a cross-sectional study would include surveys, structured observation, content analysis and official statistics and in a case study design interviewing is likely to be the main method of gathering data (Wisker, 2008).

Additionally within the framework it is necessary to consider whether the information will derive from primary sources or secondary sources and again methods must be aligned with source of the data.

5.4.1 Secondary Research

Secondary data is required for all research projects and comes from a variety of sources. In this thesis it was necessary to use secondary data in order to satisfy the first objective of the work:

- Analyse the development of management accounting practices over time.

A variety of written materials were consulted including books, newspapers, journals and publications. The materials were categorised and analysed using content analysis, articles were categorised as to key management accounting areas and the survey work undertaken in previous studies was tabulated and

can be found in appendix 2. The tabulation was necessary in order conduct a meta-analysis as to the nature and types of survey work conducted and the broad findings of that work. This analysis provides the foundation for corroborating the validity of the survey work conducted in this thesis and also to aid in answering the research question.

RQ2 - Do the management accounting tools used in service sector organisations match the tools as applied in manufacturing organisations?

A further issue associated with secondary data is the reliability of the data. In order to ensure the reliability authentication was used including the use of publications from reputable (government) sources and using journal articles which derived from academic refereed journals. In particular those journal articles which were to be relied upon for their quantitative data were further scrutinised to ensure that their methodology was sound including analysing the sampling techniques and survey instruments used.

Each article was also examined for distortion and measurement bias. The longitudinal approach of the work involved looking for any significant change to the way the quantitative data was collected over time and to accept any bias therein.

5.4.2 Primary Research

Primary research must be collected where secondary data alone cannot answer the research question and what is collected and the way it is collected relates directly to the answering of the research questions set. There are a number of methods available which can be classified as experiments, observation and communication, (Ghauri and Gronhaug, 2010). In this study the methods used may be classified as communication methods.

The first method chosen for this thesis is a cross-sectional survey in order to assess the wider picture in service organisations of which management accounting tools are used. This will allow data to be gathered which allows the following research questions to be addressed.

RQ1 To what extent are traditional and contemporary management accounting tools being applied within service sector organisations?

RQ2 - Do the management accounting tools used in service sector organisations match the tools as applied in manufacturing organisations?

Additionally in order to gain further insight from the questionnaire and to make the analysis comparable with some of the manufacturing sector surveys undertaken two sub hypothesis will be addressed:

H1- The size of the organisation influences the choice of tools used

H2 – The service type influences the choice of tools used.

The second method was interview through the use of 5 case studies which sought to serve several purposes; to validate the information obtained in the survey; to get detailed explanations as to why particular tools are adopted, the way they are used and the factors influencing the choice of tools used. The final two research questions would be addressed through the data obtained from the case studies.

RQ3 –how do management accounting tools become embedded in service sector organisations?

RQ4 What are the reasons for change/lack of change in management accounting tools used in service sector organisations.

A detailed account of these methods will now follow.

5.4.2.1 Survey

Surveys in the form a questionnaires have been an extensive source of primary data in ascertaining the degree of use and adoption of management accounting tools. Appendix 2 gives a representative overview of the questionnaires which have been produced over the last 30 years. The questionnaires tend to be cross-sectional though some work such as Guilding et al (2000) could be considered longitudinal as they consider the perspective of change over time.

Other studies are comparative as they compare results across country boundaries (see Suliaman et al, (2004) as an example).

Some of the previous work is based on contingency theory (Chenhall and Langfield-Smith, 1998) and would therefore be considered analytic surveys but the majority represent descriptive surveys.

5.4.2.1.1 Sampling strategy

The intention of the questionnaire was to focus on the service sector of the UK. In order to produce a sample which would be representative of the population some key factors were put in place. The population would include organisations which could not be reached easily such as sole traders so the population under scrutiny was reduced to organisations that could be accessed through the University of Gloucestershire's OSIRIS database.

Additionally it was decided to exclude both the public sector and also banks due to the uniqueness of their structures and systems. When these factors were removed there were 2755 organisations left in the population, this list was further scrutinised for organisations which would not be appropriate and for which there was no contact information and the final population was brought down to 1793 organisations.

It was necessary to achieve good proportional representation in the sample for two reasons. The size of the organisations was an important factor as previous research (Chenhall and Langfield-Smith, 1998) indicates that the larger firms are more likely to innovate and use new techniques in comparison to smaller firms and in terms of comparison with the previous work, understanding if this was also true in service organisations would be useful data.

The research also needed to reach a wide range of different types of service organisations if it was to be possible to draw any generalisations or to look for unique features within service organisations which would provide evidence to answer the third research question.

Following these guidelines the sample was chosen using a simple stratified random sampling method which allowed for an equally sized random sample to be selected from each stratum in the population. Thirty firms were chosen from each size category also ensuring that they represented the different classifications of service organisations in the study. A total of 150 organisations were contacted.

From consideration of the previous research work done by other academics studying the adoption rates of management accounting techniques it was felt that this sample was appropriate.

5.4.2.1.2 Survey instrument

In designing the method of distribution of the survey it was necessary to consider time and ease. Consideration of the past surveys showed that they were mainly conducted using a postal questionnaire however the web based questionnaire has become more popular as organisations and people in general have embraced technology. From that perspective it was felt appropriate to send a web based questionnaire.

The questionnaire was devised using Bristol Survey Online and using this tool enabled the gathering of the data and made extraction easier for analysis.

5.4.2.1.3 Survey Design

The design of the questionnaire was chosen with reference to the previous survey work undertaken. A number of other surveys had used the template of either Guildings et al (2000) or Chenhall and Langfield-Smith (1998) in order to devise their questionnaires. The researcher felt that Guildings et al was not appropriate since it was only concerned with SMA techniques and that the date of Chenhall and Langfield-Smiths work meant that there may be more practices which could be considered. Instead the researcher chose to emulate the design of Ross and Kovachevs 2009 work which categorised management accounting tools by categories and did not separate traditional from contemporary tools.

It was felt that this approach would help in the analysis of the data and also deflect any bias for one group of tools or another.

A full copy of the questionnaire used can be seen in Appendix 4.

The first section of the questionnaire was designed to capture general information about the respondent and their organisation, this was necessary in order to ensure that the sample was representative of the different sizes of organisations and also the industry they represented within the sector. Additionally it was felt useful to gauge the number of staff with management accounting duties in the organisation and the accounting qualifications they held in case this may also have a bearing on the tools used.

The subsequent sections asked the respondents to respond with respect to each group of tools which they used regularly, occasionally or never. An additional box was added to indicate techniques which were no longer used in order to assess whether any traditional tools had been discarded in favour of contemporary ones or any contemporary tools had been tried and discarded.

In each section the respondents were also asked to give a reason for why tools were never or no longer used. It was possible for the respondents to give a preselected response of not familiar with the technique, not appropriate for organisation or not valued by the decision makers additionally they could if they wished add additional comments. This section was useful in identifying initial reasons for lack of adoption which could be further investigated through the case study work.

In total there were 8 sections asking about different categories of management accounting tools.

Finally a section was included to assess individuals view points on their perception of the position of management accounting within their organisation.

Questions were in the form of statements using a 7 point Likert scale from strong disagreement (1) to the statement to strong agreement (7). This style of scale was common in the other studies which had been consulted (see Appendix 2). It was felt these questions would give a qualitative view relating to

the individuals and their perception of their interaction with the organisation and other actors within the organisation in terms of the use of management accounting tools.

Following the development of the questionnaire a pilot version was sent to 10 respondents some of whom were from the demographic being sought for the study to ensure the right questions were being asked and some from other backgrounds to judge the grammar, English and flow of the questionnaire. Following suggestions the questionnaire was finalised.

5.4.2.1.4 Survey Distribution

The survey was sent electronically via a web link to the person in each organisation who could be identified as the chief financial officer or head management accountant together with a covering letter.

The majority of responses were sent back very quickly (18) and all were usable. A small proportion declined to take part and these were removed from the sample.

After a period of 6 weeks a further email reminder was sent and telephone calls were made and this resulted in the remainder of the responses being received.

A total of 27 responses were received and all were complete and usable. This represents a response rate of 18%. This response rate compares well with the response rates achieved from similar surveys conducted by academics in this area (see Appendix 2).

To check validity the data was matched against other academic surveys on this topic and with interviewee's ex-post to check the reliability of the survey. Additionally the data was evaluated against the requirements of the stratification and there was found to be good representation from each size category and from each classification as per Table 5.1 and Table 5.2 below. The business service category is far larger than the other categories at 41% but this category contains a wide spread of organisations from a variety of different sub sectors

and a further breakdown shows that the organisations come from professional services, real estate services and advertising and marketing services

Table 5.1: Distribution of respondents by size of company

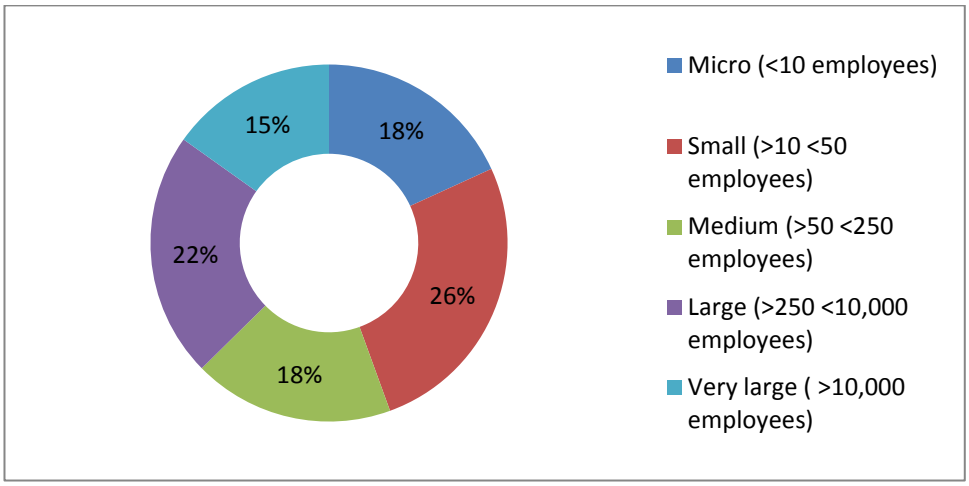
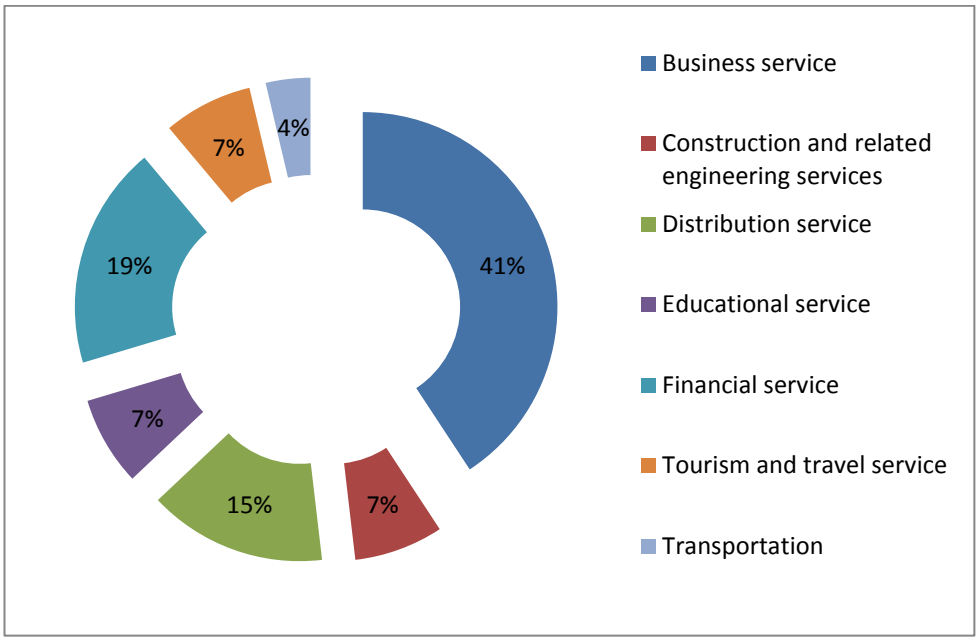


Table 5.2: % of respondents by service classification



The data was also checked for non-response bias using Armstrong and Overton's (1977) wave method which has been widely used in the accounting literature (see for example Al-Omiri and Drury, 2007; Abdel-Kader and Luther, 2008 and Auzair and Langfield-Smith. 2005). Using this method late respondents are expected to

resemble non-respondents so by comparing the data provided by early respondents to late respondents it is possible to check for differences in what might have been provided from a non-responder. Comparing early and late responders in terms of size and industry there was no difference between the content of the information they supplied and therefore it was ascertained that there is no non response bias in the data gathered and therefore does not affect the validity of the findings.

5.4.2.2 Case Studies

Survey studies can indicate general trends, but they cannot explain the processes through which management accounting practices are adopted. In order to overcome the problems associated with the use of the survey as the sole method of collecting primary data a case study approach was used in order to answer the third and fourth research questions as it was necessary to look deeper into individual organisations in order to get the rich data needed.

Using Ryan et al's, (2002) descriptions of types of cases, the cases to be used in this thesis can be described as explanatory case studies which are designed to be used to explain the reasons for particular observed accounting practices.

The use of case studies in management accounting research has developed over time. Otley and Berry (1994) reflected that at that point in time the use of case studies was increasing but that the contribution from the cases was not always clear. Scapens (2006a) felt by that time case studies were more widely used but he felt the way forward with case studies was to use the theory to analyse the case rather than use cases to illustrate theory.

5.4.2.2.1 Selecting cases

Selecting suitable cases which will complement the methodological stance is important in this case since the researcher was attempting to get a variety of viewpoints from which it may be possible to see common themes (a thematic approach) it was necessary to choose the cases to ensure the sizes and

sectors of the organisations were different. Three of the cases chosen were companies who had completed the questionnaire and were contacted on the basis of the responses they had given and the final two cases were made through personal contacts and represented diverse companies which would give additional depth to the data.

The final choice of five cases ensured that as far as possible there would be variety in the organisations both in terms of size and also service sector. Table 5.3 below shows the overview of the cases:

Table 5.3: Overview of cases used

	Size	Service sector and brief description of company activities
Case 1	Large	Transport services. Retailer of New and Used Cars with After Sales departments
Case 2	Small	Distribution services. Wholesale and retail internet sales
Case 3	Very Large	Communication services. Global telecommunications
Case 4	Medium	Recreational sporting and cultural services. National sporting events.
Case 5	Large	Educational services. Academic bookshops

5.4.2.2.2 Collecting evidence

In order to gather the evidence the researcher must be mindful to use a method which will allow evidence to emerge from the case but which will also address the research questions set (Ryan et al, 2002). In this case in order to gather the most meaningful data it was necessary to interview appropriate personnel who had a vital link with the management accounting function of the organisation. There are a number of interview methods which can be undertaken.

A semi-structured interview method was chosen. This method requires the researcher to have a series of questions which may be asked in order to ensure the same broad areas are covered by each interview but open ended to allow the interviewee to express opinions.

In the context of the research questions this method would ensure that there was sufficient scope for the interviewees to explain the rationale behind the use of certain techniques including how and why they were used and also to discuss the variety of factors that they felt inhibited them from adopting different tools within their business.

The interviews were conducted face to face to allow for conversation to develop from the opening questions asked. Each interview lasted approximately one and a half hours.

Each interviewee was contacted by email in advance of the interview and was given the completed copy of their questionnaire and the loose structure of the interview with the key areas to be explored. The researcher used the same loose structure and key questions with each interviewee in order to ensure that the same key areas were covered. Each interview was recorded on a digital recorder.

The structure of the interviews together with the transcription of one of the interviews can be found in Appendix 5.

Following the interviews the recordings were transcribed and thematically analysed to look for similarities and differences from the responses of the interviewees. As there were five cases used it was not deemed necessary to use software to code the data and to look for themes. This work was done manually by the researcher.

The researcher was mindful that in terms of primary research stemming from case studies primary documents may be considered more robust than interview testimony but this was discounted as the reason for the interviews was to primarily gather the views and opinions of the participants which could not be dome through primary documents.

5.5 Ethical Considerations

Hussey and Hussey, (1997) reflect that it is not possible to conduct research without facing ethical problems. In this study the concerns reflect the confidentiality of the data and the impact on the individuals or organisations if the data can be traced to them.

Due consideration was given to the University of Gloucestershire's ethical research guidance and ethical approval was granted. In particular the researcher was mindful of the University's guidance in relation to the relationship with the research participants.

In this research full confidentiality is being observed so that it is not possible to link any of the data from either the survey or the interviews to any one individual or their organisation.

Informed consent was sought on the questionnaire by ensuring that the participants were aware what the research was for and how their responses may be used. In the interviews confidentiality was agreed in the email or telephone call arranging the interview and repeated at the start of each interview. The research ensured that through the informed consent the participants were aware of the nature and aim of the research, who was conducting it, how it was being conducted, the possible consequences of the research and the way the results were to be disseminated including though the PhD and also through future articles based on the PhD.

Post PhD the researcher has given consideration to the way in which the raw data relating to the participants is held. The data will be held securely via password protected computer files and hard copy both of which are coded so that the raw data cannot be linked to individuals or organisations and will be kept for a period of 5 years or longer if necessary to aid in the completion of future publications. At the end of this time the computer files will be deleted and the hard copies shredded.

5.6 Evaluation of research methods

There are three main criteria for evaluating business research: reliability, replication and validity (Bryman and Bell, 2011). To ensure the quality and credibility of the research these must be considered.

5.6.1 Reliability

Reliability relates to the ability of the research to be repeated. Reliability can be tested in quantitative studies where we can consider if the measures used are stable or not. It is possible to repeat a study to test the reliability of the results which is known as replication. In a qualitative study reliability would reflect whether the same observations and interpretations could be made by different observers on separate occasions, (Hussey and Hussey, 1997).

Reliability can be measured in terms of stability so that we can assume that if the questionnaire was given to the same respondent at different times then they would give the same responses. Since the questionnaire asks about the use of management accounting tools in the workplace then within a short time frame the response of a respondent should be the same it would only be expected to change in a longitudinal study. The questions in the survey were designed to be unambiguous to answer and therefore replication of the same results could be expected.

Van der Stede et al (2005) analysed the quality of survey work in management accounting by evaluating the mail surveys published in 8 accounting journals between 1982 and 2001 in light of concerns regarding the reliability of the data obtained. They found that over time the quality of mail surveys had improved since there was greater evidence of pre-testing, follow up procedures and non-response bias analysis.

With respect to qualitative research Bryman and Bell, (2011) also identify external reliability in the same way. In this research as the interviews were semi structured if they were repeated it is likely that the same data would be

forthcoming from the interview. In their examining of Guba and Lincoln's 1994 research Bryman and Bell also identify two other criteria for judging qualitative work: trustworthiness and authenticity, they state that Guba and Lincoln had concerns about qualitative and quantitative research having the same measures of reliability and validity. Ryan et al, (2002) suggest that it is procedural reliability that should be considered in case study design, that is to have a good research design which clearly addresses the research questions and is properly documented.

Within the realism paradigm Healy and Perry, (2000) suggest six quality criteria for case study research which include the ontological appropriateness, contingent validity, multiple perceptions of participants and peer researchers, methodological trustworthiness, analytic generalisation and construct validity.

5.6.2 Validity

Validity is the extent to which the research findings support what is happening in a given situation and how generalizable they are. Hussey and Hussey, (1997) suggest that in positivistic work there is always a chance that the experiment cannot be successfully repeated and therefore validity may be low whereas in a phenomenological study where there is a detailed investigation and analysis there is likely to be greater validity.

There are three main measures of validity; construct validity, internal validity and external validity.

Construct validity relates to being able to measure the concept you want with the measure you have used. Internal validity relates to causality and the degree to which a change in one variable will cause a change in another though Ryan et al (2002) suggest that in the context of case study research internal validity becomes contextual validity and the external validity relates to the ability to generalise from the results.

Problems in achieving external validity stem from problems with the data sample relative to the size of the population or an inability to relate the findings

to another point in time and also from one environment to another such as one country to another.

Lukka and Kasanen (1995) reflect on the ability to make generalisations in accounting research and in particular case study research. They highlight three rhetorical elements used to generalise accounting research which are statistical, contextual and constructive generalisations.

Statistical generalisation rhetoric relies on formal arguments from mathematical theory, contextual generalisation rhetoric is based on understanding the institutional and historical context of accounting and constructive generalisation relates to the diffusion of innovation

In order to overcome the problems of external validity when using one research method evidence from a variety of methods can be used. Using mixed or multiple methods within a study can increase the confidence in the findings (O'Reilly and Kiyimba, 2015; Ghauri and Gronhaug, 2010).

The approach of using more than one research method to assure validity is known as triangulation. Hussey and Hussey, (1997) cite Easterby-Smith et al (1991) in suggesting that there are four main types of triangulation.

Data triangulation takes place where date is collected at different times or from different sources.

Investigator triangulation occurs where different researchers independently collect and compare data.

Methodological triangulation occurs where both quantitative and qualitative methods of data collection are used.

Triangulation of theories occurs when a theory from one discipline is used to explain phenomena in another.

There has been some development in the field of accounting to use triangulation of methods, Modell (2005) reflected on the calls being made in management accounting to use method triangulation and that there was evidence in empirical management accounting research. He also went on to

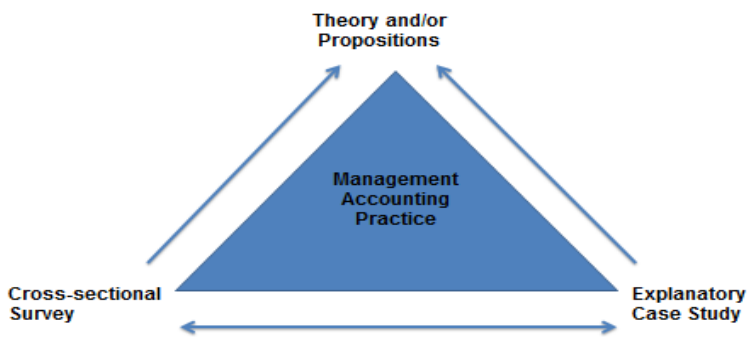
suggest that a "closer interweaving of case study and survey methods…….stand a better chance of addressing a broader range of validity issues" (Modell, 2005:250).

This study mirrors such a development and uses a survey to provide statistical evidence of the general trend of traditional and contemporary management accounting tool adoption in service industries, and then case studies are conducted to elicit a deeper understanding of the adoption decision in an organisational context.

Using Lukka and Kasanen's (1995) contextual generalisation rhetoric concept, the use of the case studies in the context of this study can widen the validity of the research results by efficient triangulation of data and by communicating the business context within which the case study data resides.

The following figure shows the extent of the triangulation of the methods used in this study.

Figure 5.1: Triangulation of research methods



Source: Adapted from Spicer (1992:24)

5.7 Chapter Summary

This chapter provides an overview of the research strategy, design and methods used in this thesis.

The nature of this study and its underlying paradigm suggest that both a qualitative and quantitative research strategy is needed to answer the research questions successfully. To that end two research designs will be employed in this study in the form a cross-sectional survey and a case study design. This approach will give credibility to the data through both data and method triangulation.

Data triangulation will be possible through the use of reliable secondary sources which can be compared with the primary data gathered in the research.

Method triangulation will be possible by comparing the results of the different methods used to gather the primary data.

The primary research will focus on two methods. The first stage of the research utilised a broad based questionnaire in order to obtain valuable data regarding what management accounting techniques are being used across a wide range of service businesses. The second stage of the research used five case studies to reflect the detailed reasons for the adoption and adaption of the techniques in an organisational context with the objective of further understanding the needs of management accountants in a service context.

Chapter Six: Survey findings

6.1 Introduction

The use of surveys in management accounting research has increased substantially since the claims of Johnson and Kaplan (1987). Scapens (2006a) reflects on the survey work done to that date which was designed to evaluate whether there were changes in management accounting practices. In the UK the work of Drury et al 1993, Bright et al, 1992 and Dugdale, 1994, sought to explore the development of management accounting tools in manufacturing organisations. Similar work in an international context has followed since then notably the work of Chenhall and Langfield-Smith, 1998, Guilding et al, 2000, Joshi, 2001 and Suliaman et al, 2004. This work extended the research to specifically look at the perceived adoption of contemporary tools but predominately focused on manufacturing organisations.

Some of the more recent surveys have included service organisations in their sample including Yazdifar and Askarany, 2010 and McLennan and Moustafa, 2012, but they have not used the data to provide any insights into service sector adoption and use of management accounting techniques. The survey most comparable with the research aims of this thesis is the 2009 survey undertaken by Ross and Kovechev.

The Ross and Kovechev survey was taken as a model for this survey as it considered service sector organisations and categorised a large number of tools into key areas but not separated as to traditional and contemporary.

The key aim of this survey was similar to that of the other surveys which was to examine the use of traditional and contemporary tools of management accounting; however the key differentiating factor was that this survey was to explicitly explore only service organisation responses, carried out exclusively on UK organisations.

By observing the adoption rates of traditional and contemporary practices two research interests will be met. The first is that a comprehensive picture of the use of management accounting tools in UK service industries will be captured

and additionally specific points for discussion with the case study companies may be apparent. This study extends the survey of Ross and Kovachev by also examining the relationship between the tools used and their industry type and size as well as to provide some qualitative insights from the management accountant's perceptions of the management accounting function within their organisation.

6.2 Research objectives of the survey

The survey is specifically designed to address research questions one and two:

RQ1 - To what extent are traditional and contemporary management accounting tools are being applied within service organisations?

RQ2 - Do the management accounting tools used in service sector organisations match the tools as applied in manufacturing organisations?

It will address the following objectives:

1. To establish the scale to which accepted traditional and contemporary management accounting tools are utilised in UK service industries
2. To compare the results with the Ross and Kovachev 2009 research and with the findings of exclusively manufacturing surveys.
3. To evaluate the degree to which size of organisation affects the choice of management accounting tools used.
4. To evaluate the degree to which the service industry type is linked to the choice of management accounting tools used.
5. To evaluate the views of accountants as actors in focus of their perception of management accounting within the organisation.

6.3 Survey structure

The survey was structured to evaluate the use of management accounting tools. These tools were split into seven categories each orientated at a different aspect of management accounting usage and into three overall areas of operational, management and strategic tools. Each of the categories contained both tools which would be considered traditional in nature and those which are academically referred to as contemporary. A copy of the survey tool can be found in appendix 4.

The survey allowed the respondents to distinguish between tools that they use regularly as part of their main management accounting routine and also those which might be used occasionally in order to satisfy adhoc or bespoke reporting. The respondents were also asked to note any tools which were no longer being used as this would indicate whether unsuitable tools were being discarded from use and new tools being brought in to replace them.

The survey identifies the management accounting practices which are most commonly used and least used in a service sector context, in general and specifically within each group.

The degree of familiarity with techniques was also questioned in order to ascertain the likelihood of a theory practice gap in service sector management accounting.

Finally using a 7 point Likert scale the respondents were asked to consider statements reflecting their view of management accounting and its position in the organisation

6.4 Organisational context

The first section of the questionnaire was designed to capture data would be used to ascertain whether the sample was representative in terms of size and service sector classification as well as gauge the number and qualifications of those responsible for the management accounting function within the organisation.

The survey's respondents are all employed in the service sector and come from key sectors of the WTO service sector classifications. 41% of the respondents belong to the business service category, which itself is broad and a further breakdown shows that the business service organisations come from different sections of this category including professional services, real estate services, advertising marketing and management consultancy services. Table 6.1 below shows the breakdown of respondents by service category, whilst Table 6.2 shows the breakdown of respondents within the business services classification.

Table 6.1: % of respondents by service classification

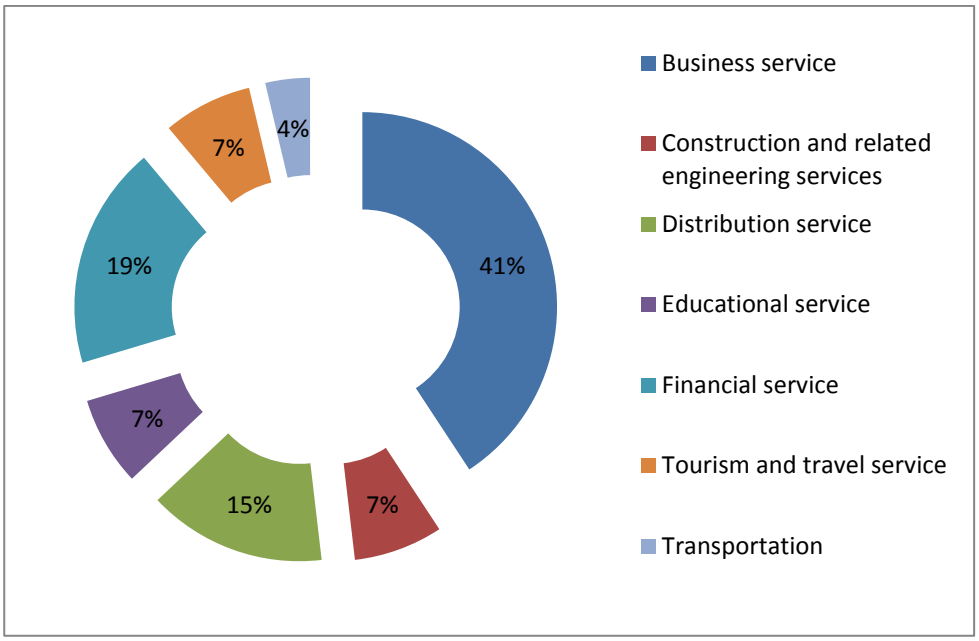
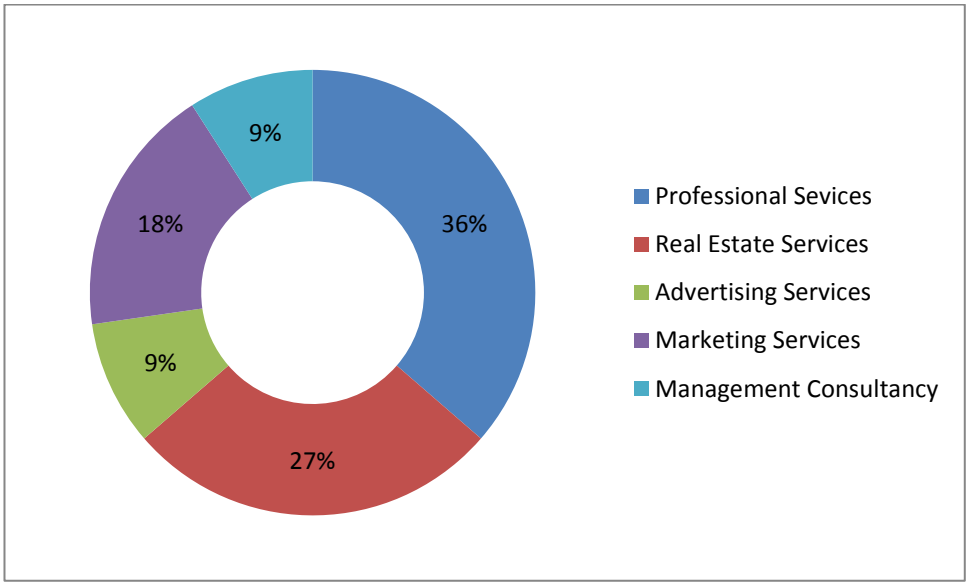


Table 6.2: % of respondents from different business services sub categories



The respondents also come from organisations of varying size from micro with less than 10 employees in total (18%) to very large with more than 10,000 employees (15%). The spread of size is fairly even with all groups being well represented in the results. 44% of the businesses have less than 50 employees which is consistent with research that suggests that small size is a key characteristic of service organisations (Lowry, 1990). Table 6.3 below shows the distribution of respondents by company size, whilst Table 6.4 shows the link between organisation size and service classification of the respondents.

Table 6.3: Distribution of respondents by size of organisation

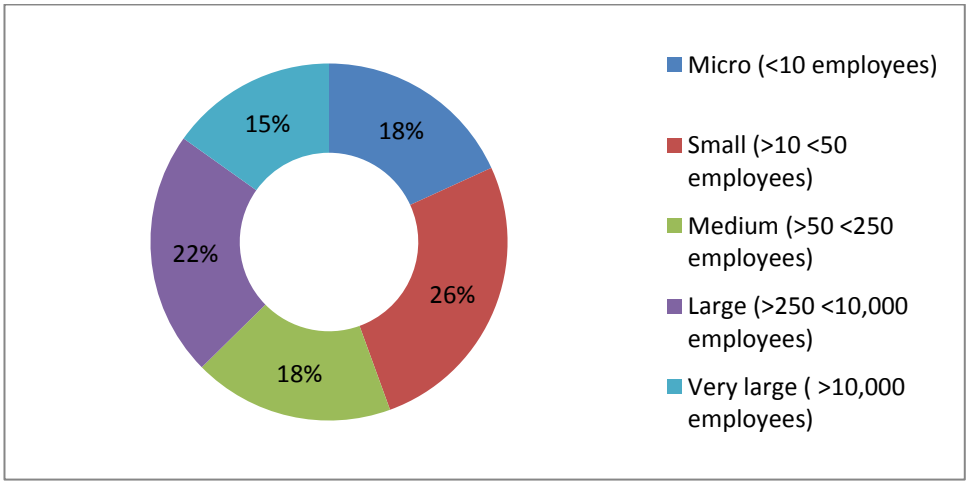
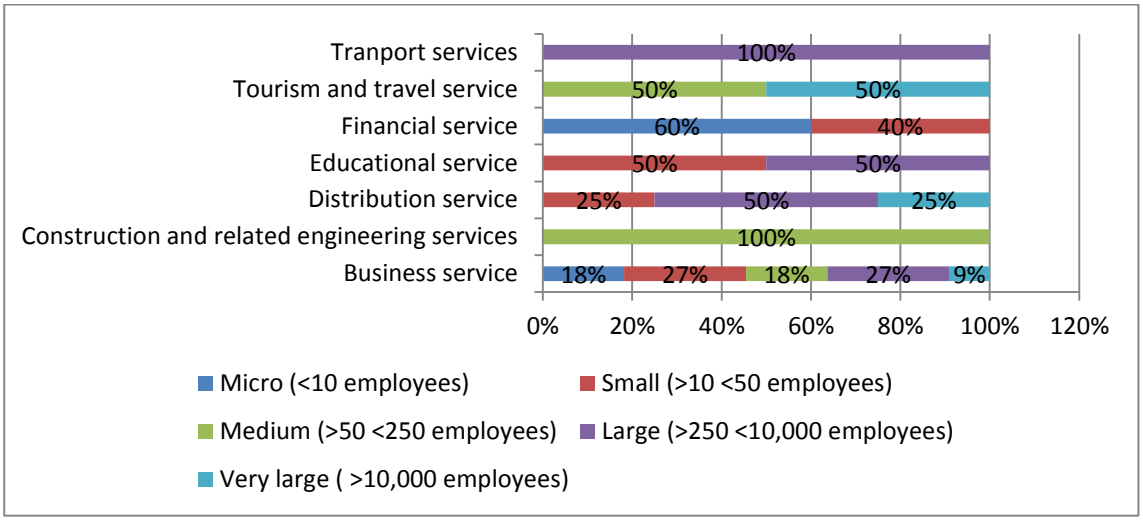


Table 6.4: The distribution of size of organisation within service classification



All the organisations employ fully qualified accountants to do their management accounting work. The number of accountants employed varies according to the size of the organisation with small and micro organisations on average employing 1 or 2 people to very large organisations, which employ on average 450 people to work within the accounting function. The majority of accountants are CIMA qualified, 35% of all the accountants working in the organisations surveyed are CIMA members followed by the Association of Chartered Certified Accountants (ACCA) and ICAEW and 56% of the organisations have qualified CIMA members conducting the management accounting work, followed by 40% for ACCA and ICAEW. It can be concluded from this that those conducting the management accounting work have been mainly trained and educated by the main accounting bodies of the UK.

6.5 Management Accounting Tools Used

The management accounting tools used were organised into 8 groups representing the following key areas:

Costing Tools (13 tools in list)

Pricing Tools (6 tools in list)

Budgeting Tools (9 tools in list)

Profitability Tools (5 tools in list)

Operational Tools (10 tools in list)

Performance Measurement Tools (5 tools in list)

Performance Management Tools (8 tools in list)

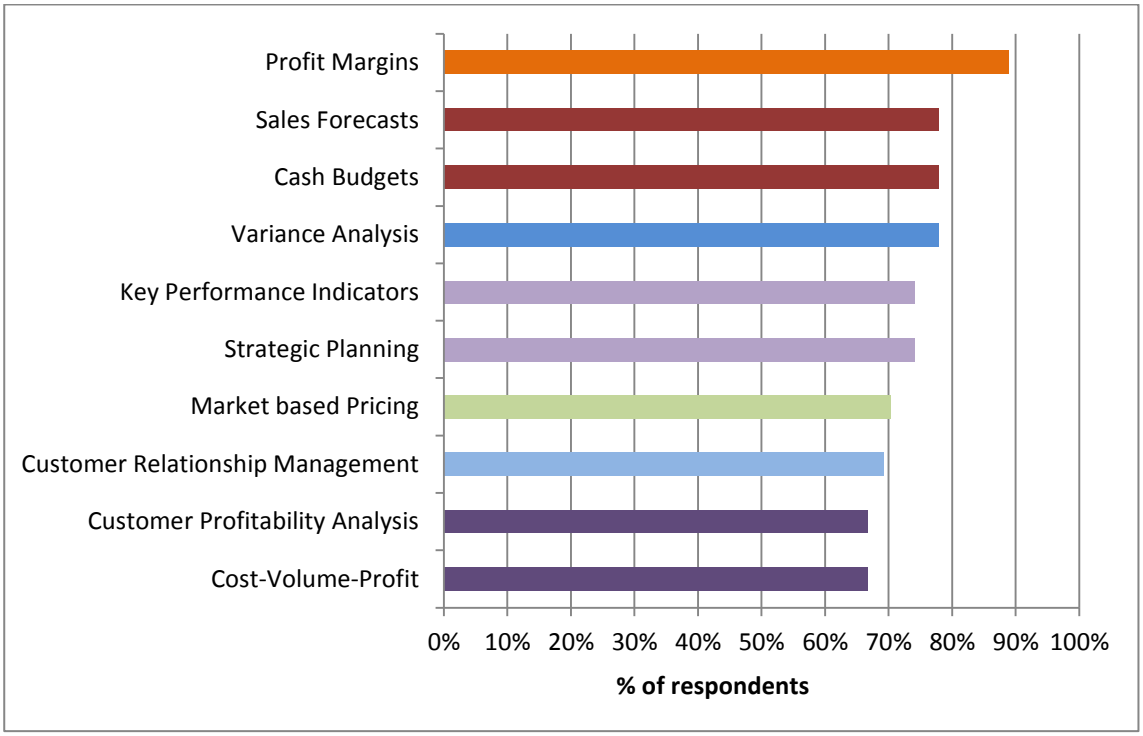
Strategic Tools (10 tools in list)

A total of 66 different management accounting tools were reviewed including those reviewed in the literature review as being traditional in nature and those considered contemporary. In respect to the analysis it was not necessary to use summary statistics as the sample size made it possible to evaluate the actual data produced.

6.6 Overview of Results

The data was reviewed to establish which of the 66 techniques surveyed were most commonly used. Table 6.5 below shows the top ten tools on the basis of regular usage within the organisations.

Table 6.5: Most Used Tools

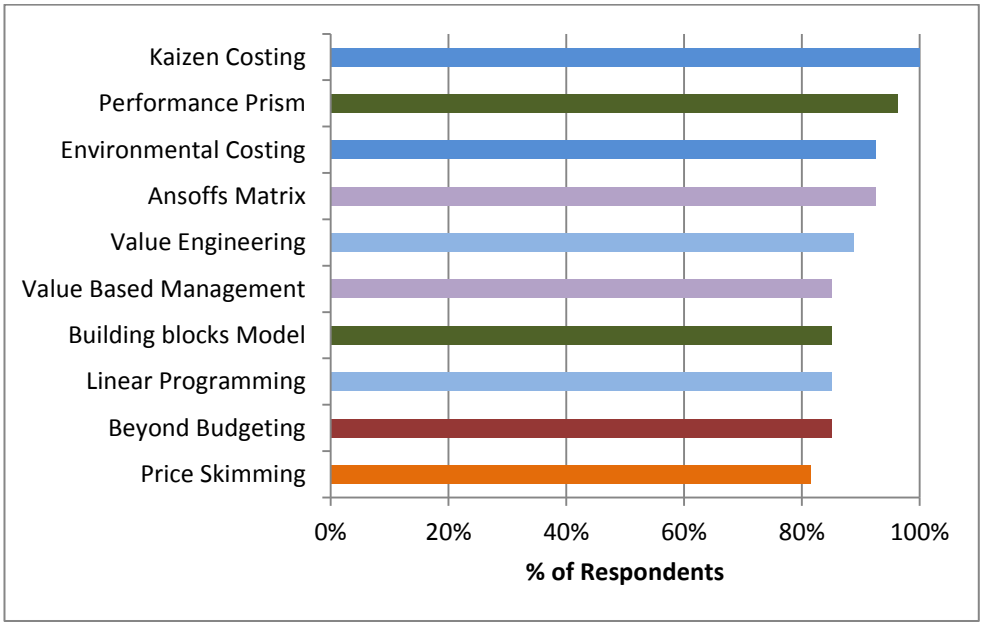


The table clearly shows Profit margins are the most popular tool with 88% of the organisations using them on a regular basis. It is interesting to note that two of the most popular tools come from the budgeting category, the strategic tools category and the profitability tools and one technique from each of the other areas except for performance management tools which is not represented in the top ten. This data clearly shows that the majority organisations are regularly using tools to serve a variety of different purposes and that they tend to favour the same tools.

It should also be noted that with the exception of customer profitability analysis and customer relationship management all of the techniques displayed above would be considered more traditional in the service sector context.

If attention is paid to those techniques which the respondents concluded were not used in their organisations the ten least used tools appear as in Table 6.6 below:

Table 6.6: Least Used Tools



The least used tools come from six out of eight of the categories with only two not being represented (Profitability Tools and Performance Measurement Tools). 100% of the respondents agreed that they never used Kaizen costing whilst this tool was developed within a manufacturing environment it does have applications in service organisations. It is clear that all of the tools on the list would be (with the exception of linear programming and price skimming) considered contemporary in nature which gives an indication that these tools are not being widely used in service sector practice.

The reasons given for not using the tools above, was either the respondent was unfamiliar with the technique or that the technique was not felt to be suitable. Six of the above tools were also found to be amongst the 10 tools that respondents said they were unfamiliar with see table 6.21 for further details. The amount of unfamiliarity with these tools may suggest that a theory practice gap in terms of knowledge is evident.

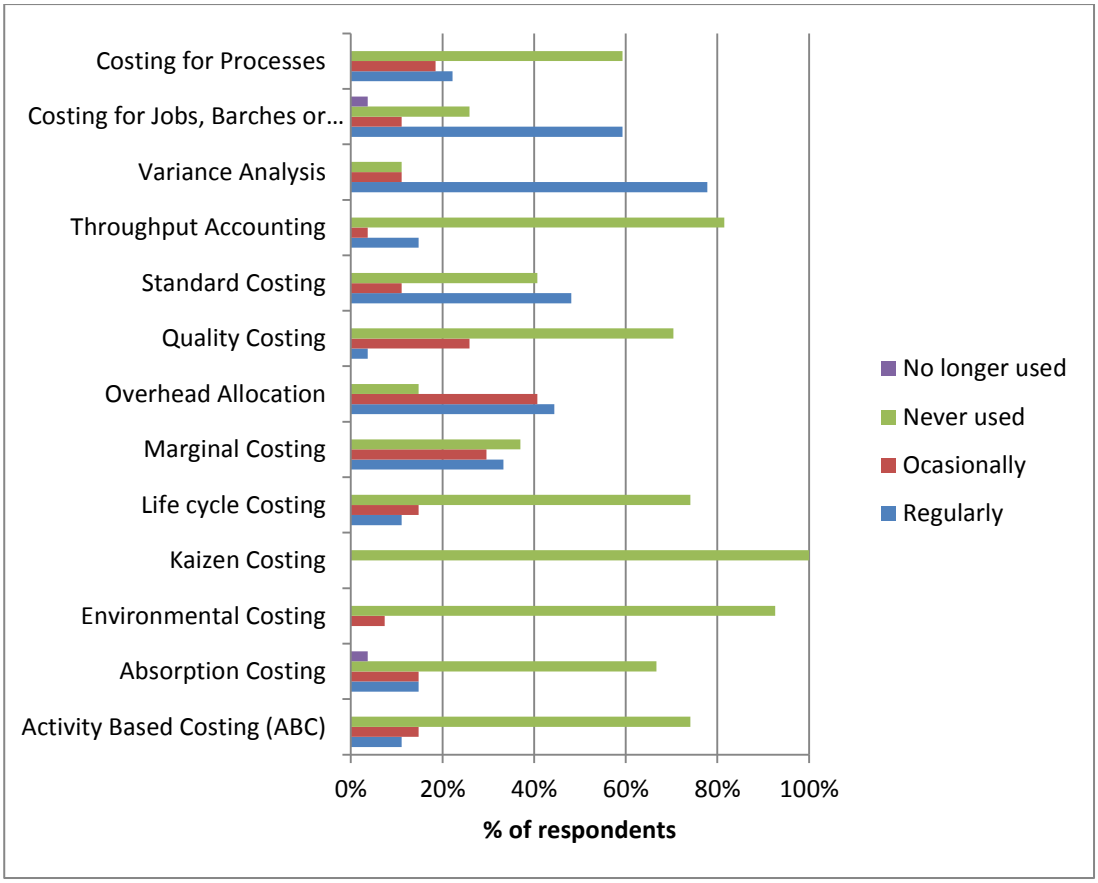
6.7 Operational Tools

The key tools which were considered to be operational in nature were separated into several categories. These included Costing Tools, Pricing Tools, Budgeting Tools and Other Operational Tools. Each category contained both tools which are considered to be traditional and contemporary in nature.

6.7.1 Costing Tools

Consistent with other studies (notably Ross and Kovachev, 2009) the main tools used are variance analysis (92%) and overhead allocation (88%) based on regular and occasional use. Other traditional tools such as marginal costing and costing for jobs were also widely used. This is to be expected as the nature of many services' mean that work is bespoke and heterogeneous in nature.

Table 6.7: Usage of Costing Tools



The tools which are not being used are those which are aligned with the contemporary view including Kaizen and Environmental costing. It is also interesting to note that Activity Based Costing usage also lags behind other costing tools in service organisations with only 26% of respondents either regularly or occasionally using this tool.

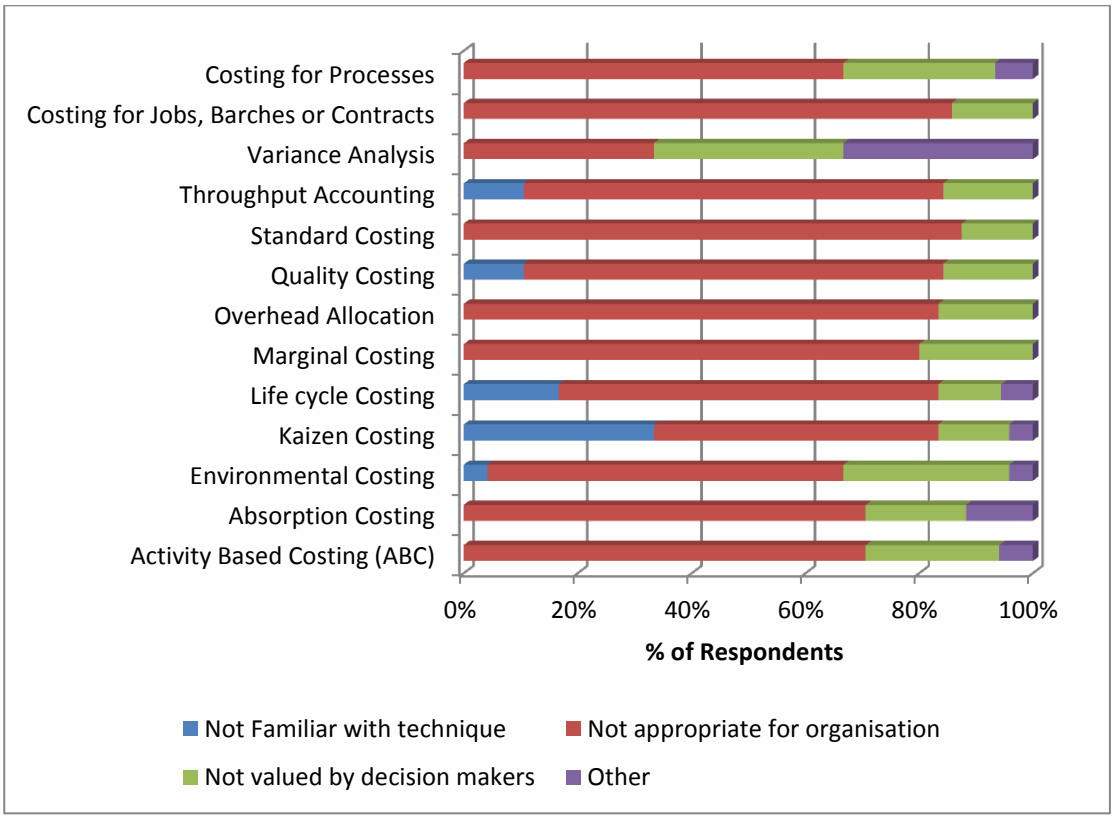
The data also suggests that on average respondents use four tools from this category on a regular basis and an additional 2 tools occasionally. It is only the very large firms which use a larger number of tools on a regular basis (the average usage for very large firms is 8 tools).

In terms of the importance of the sector classification business services, financial services and education services are the main users of variance analysis and there is little surprise that construction companies in particular make the most use of costing for jobs, batches and contracts closely followed by business services and transportation services. For other costing tools there is no distinct pattern relating them to business classification.

For the tools which are not used respondents were asked to give reasons for why those tools are not used Table 6.8 below shows the responses. It is clear with regards to the tools not used the main reason is that the tool is not thought appropriate for the organisation however in the case of the more contemporary tools such as Kaizen and lifecycle costing it is clear that there is also a degree of unfamiliarity with the technique. There is no evidence to suggest that there is any link between lack of familiarity and organisation size.

Some respondents gave a distinct reason for lack of adoption; an educational sector respondent commented that absorption costing was not used because it is impossible to absorb some costs to the service provided at a unit level with any degree of accuracy resulting in the possibility of poor decision making clearly illustrating the difference in characteristics between service and manufacturing organisations. It is also interesting to note that in another instance the reason given for lack of use is “lack of time and resources” which comes from a medium sized organisation with only 1 management accountant.

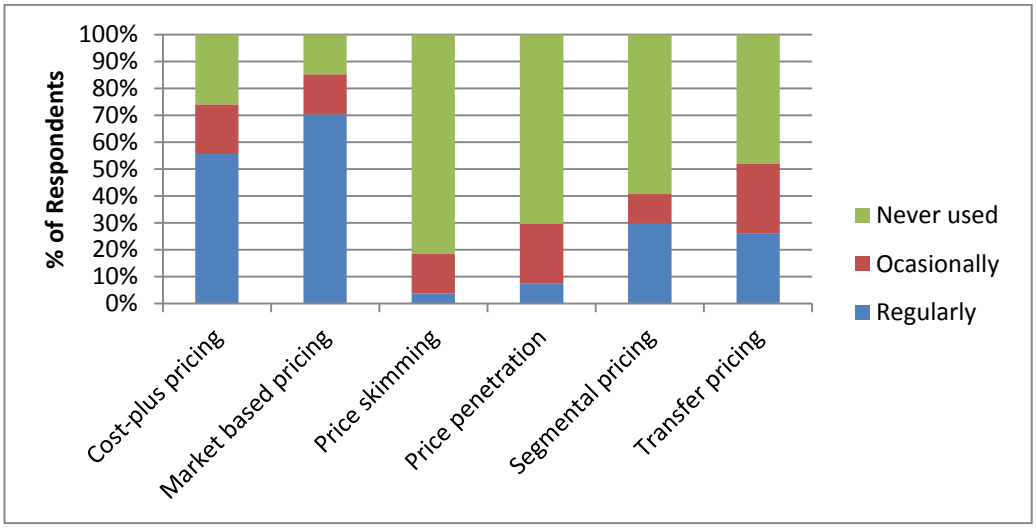
Table 6.8: Reasons for non-use of Costing Tools



6.7.2 Pricing Tools

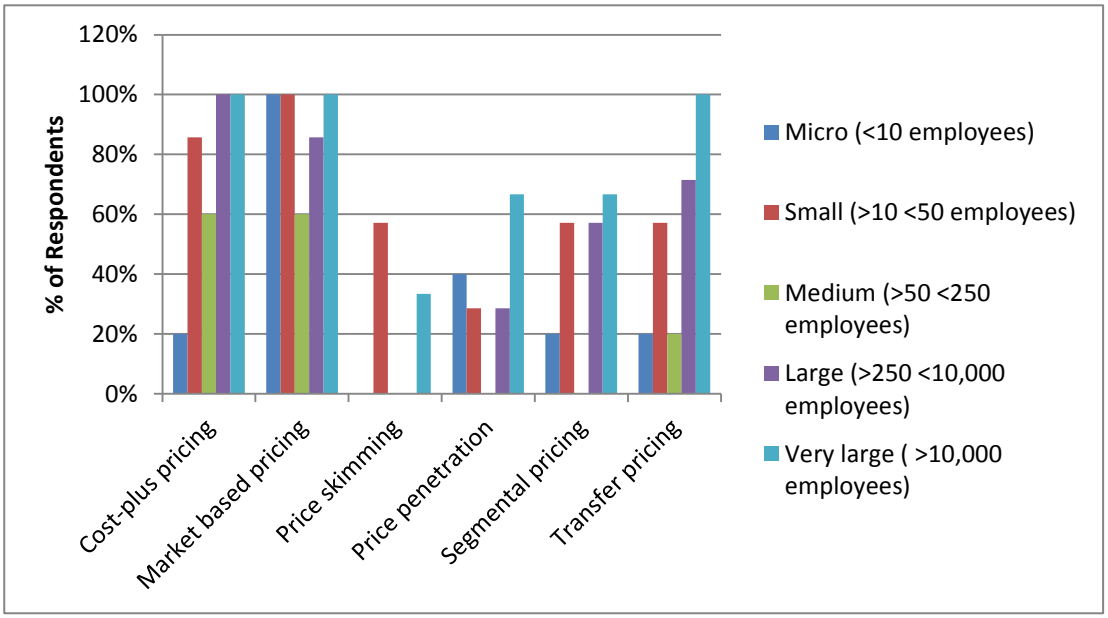
The two main pricing tools used are market based pricing and cost-plus pricing with 85% and 73% of organisations using them regularly respectively again this is consistent with that found in the study of Ross & Kovachev, (2009) and also Avlonitis and Indounas (2006). The usage of pricing tools can be seen in Table 6.9.

Table 6.9: Usage of Pricing Tools



The number of techniques used here is also low with many of organisations sticking to the use of just these two techniques though the very large organisations on average use 4 out of the 5 techniques regularly and all five when the occasional use is counted. When regular and occasional use, are both considered it is the small firms who use the greater variety of methods after the very large organisations with 4 out of 5 tools used. As expected it is only the very large organisations which make regular use of transfer pricing. Full details of the usage by size of company can be seen from Table 6.10 below.

Table 6.10: Use of Pricing Tools by Organisation Size

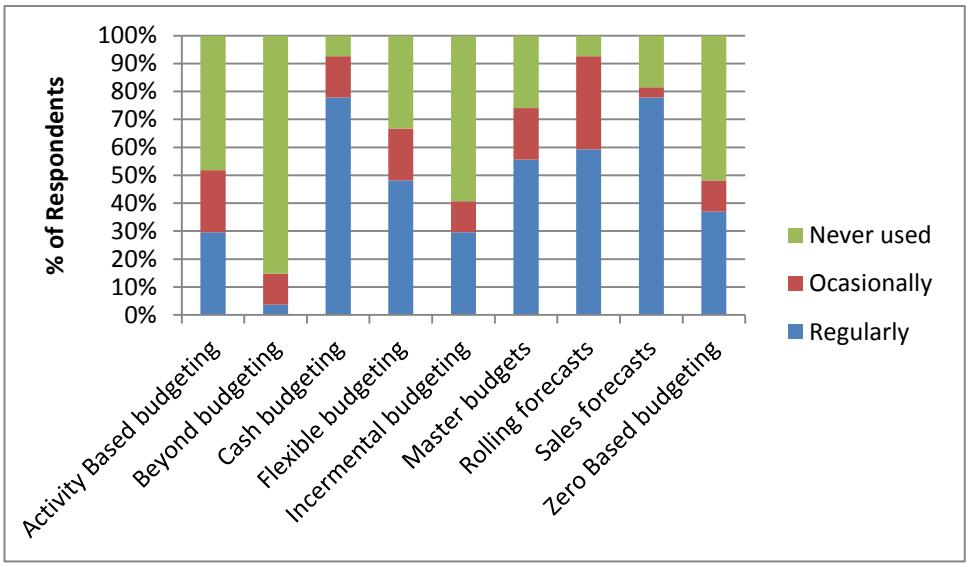


Pricing in service organisations is an area where it might be expected that diverse patterns appear due to the nature of the service provided and the characteristics of the customer. The evidence provided from this research does not however suggest that this is the case though it is clear that organisations in the business services classifications are the main non users of price skimming this is because this technique is considered short term and in many business services such as property rental a much longer term approach is required to the price. It can also be noted that where respondents were not familiar with a tool it was in relation to price skimming and price penetration and the majority of respondents came from the business services category where in particular those tools are less likely to be appropriate.

6.7.3 Budgeting Tools

The popularity of budgeting tools can be seen from Table 6.11 below

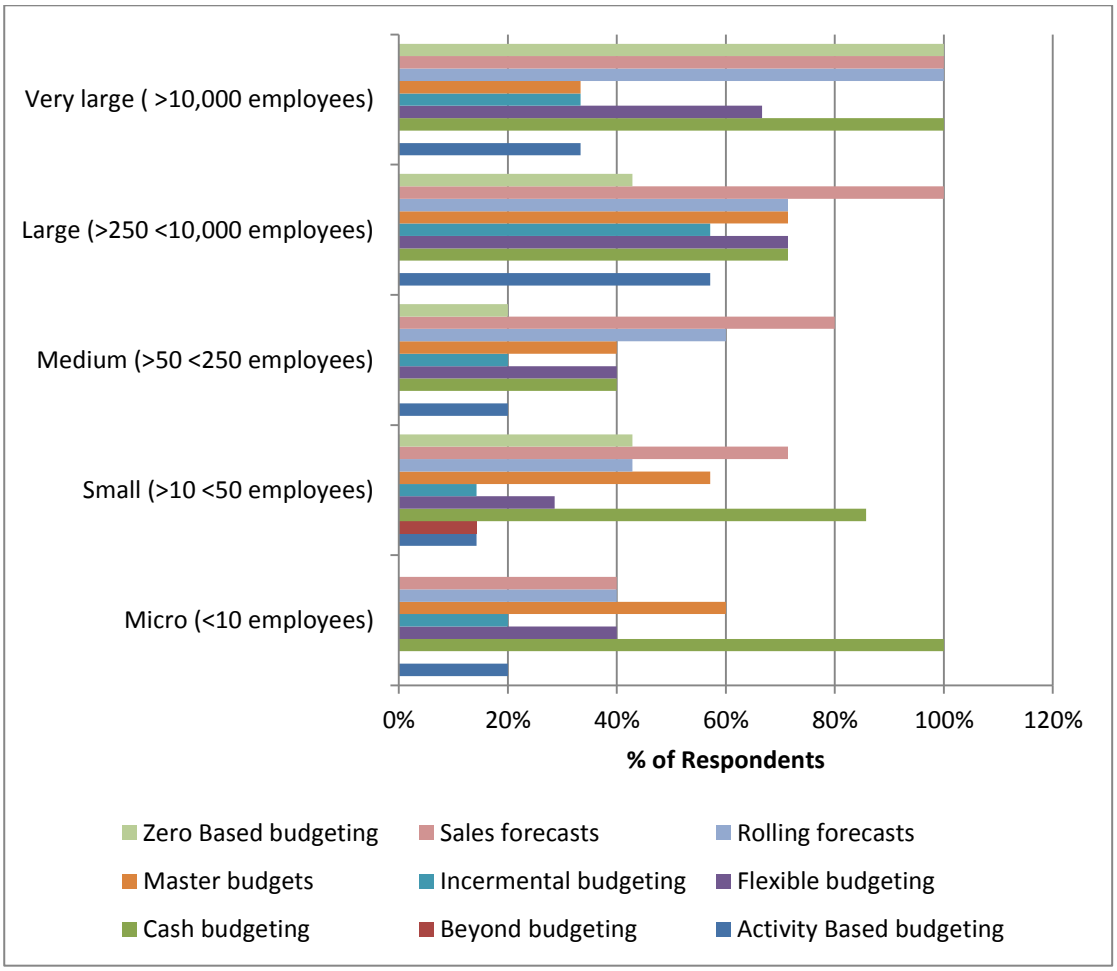
Table 6.11: Usage of Budgeting Tools



From the table it can be seen that service organisations pay particular attention to their cash position utilising cash budgets, rolling forcasts and sales forecasts extensively. The data suggests that service organsiations are not considering the use of contemporary appraches such as beyond budgetting even though they may often be organised in an organisation structure suited to such an approach.

As can be expected it is the largest organsiations which make use of the most techniques and on average the organisations make use of 5 techniques out of the 9 on a regular basis and even the smallest organisations regularly make use of at least 4 techniques which confirms that budgetting activity is seen as important in service organisations. Table 6.12 shows the regular use of budgeting techniques according to the size of organisation.

Table 6.12: Regular Use of Budgeting Tools by Size of Organisation



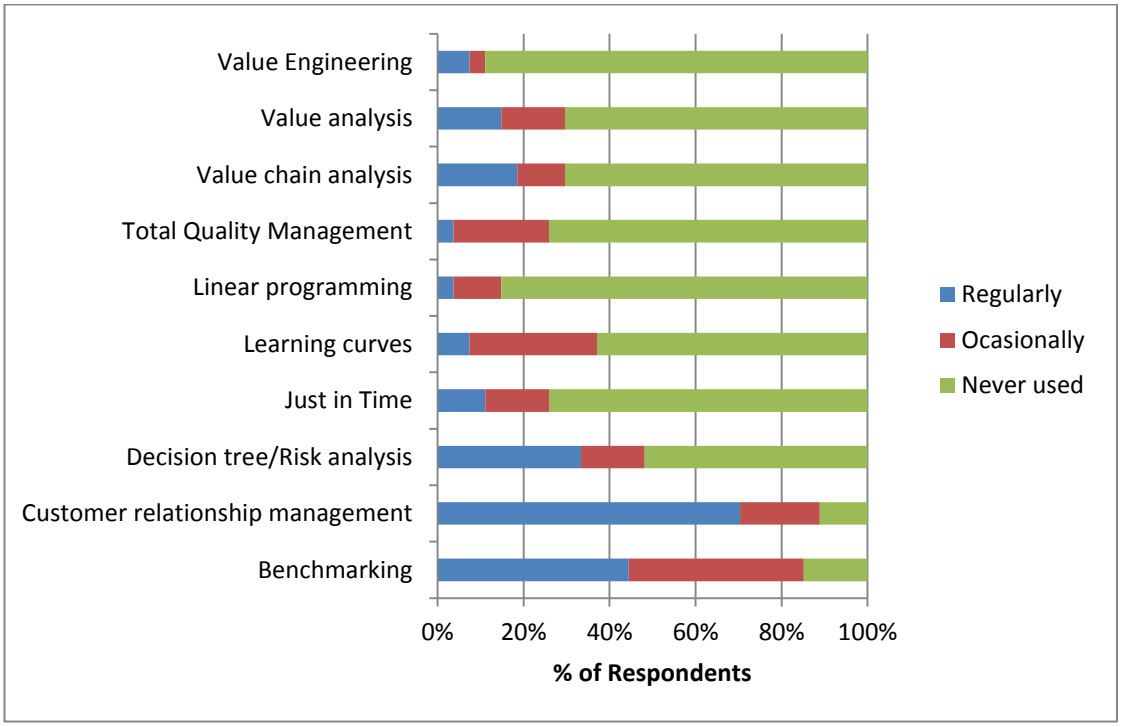
In terms of business sector it is the transportation organisations which make the greatest use of budgeting tools followed by the business and tourism sectors.

In consideration of the tools not used the explanation for the lack of use is predominately that it is not appropriate for the organisation however in the case of Beyond Budgeting 36% of respondents not using this tool were not familiar with it again highlighting a theory/practice gap in respect of contemporary tools. One medium sized business service organisation indicated that activity based budgeting was currently under review to assess whether it would add value to the company.

6.7.4 Other Operational Tools

This category brings together a wide variety of techniques which could be used operationally in an organisation and which tend to be more contemporary in nature. Table 6.13 below shows the overall usage of these tools.

Table 6.13: Usage of Operational Tools



There are only two techniques in this section that have over 50% usage, namely benchmarking and customer relationship management. It could be argued as was the case for customer profitability analysis that these tools are more widely recognised and are easy to adapt to service organisations making their adoption higher. Other tools are more bespoke and have limited use on a routine basis such as decision tree analysis and linear programming. Others such as Just in time and value chain analysis may be considered of more value in a manufacturing context.

An interesting observation is that Total Quality Management (TQM) does not appear widely used in the firms surveyed this may be coupled with the lack of interest in Kaizen as a costing method. This is interesting as to have a customer facing business and employ customer relationship management it could be considered appropriate to apply the principles of TQM. The 2007

survey by Khamalah and Lingaraj which specifically considered the use of TQM in small service sector organisations found that whilst there was commitment to the use of TQM it was rarely translated into action and they concluded that their results were in line with previous manufacturing sector results. Whilst specifically discussing US firms Khamalah and Lingaraj suggest implementation of TQM could result in a strategic competitive advantage for small service sector businesses in the global marketplace.

On average again only 2 tools from the selection of 9 tools available were used regularly with only the very large organisations using more than 2 tools on a regular basis. Unlike the results of Ross and Kovachev this study found that even the smallest organisations made regular use of benchmarking.

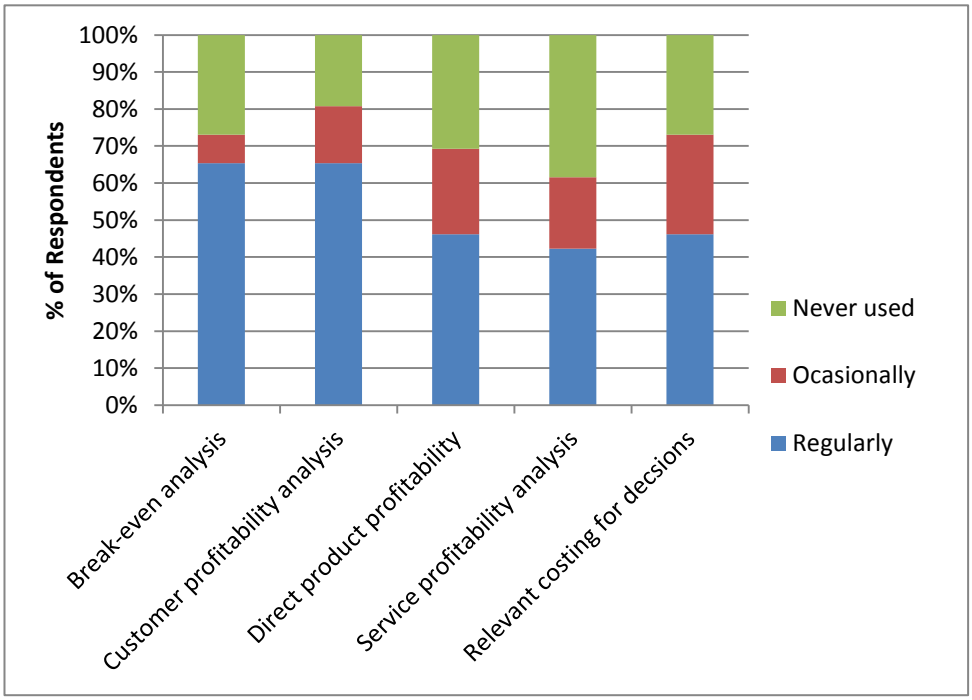
It was noticeable that for some of those techniques not being used the reason was lack of familiarity in particular the techniques of cost management such as value analysis and value engineering; value engineering was avoided by all but the largest organisations. Whilst other tools were considered not valued by decision makers, which again is an interesting observation given the use of these techniques in a decision-making context.

6.8 Profitability Tools

Profitability tools appear to be used consistently by the organisations observed.

Table 6.13 below shows that there is fairly uniform use across all of the techniques surveyed with little evidence to show that techniques are being avoided.

Table 6.13 Usage of Profitability Tools

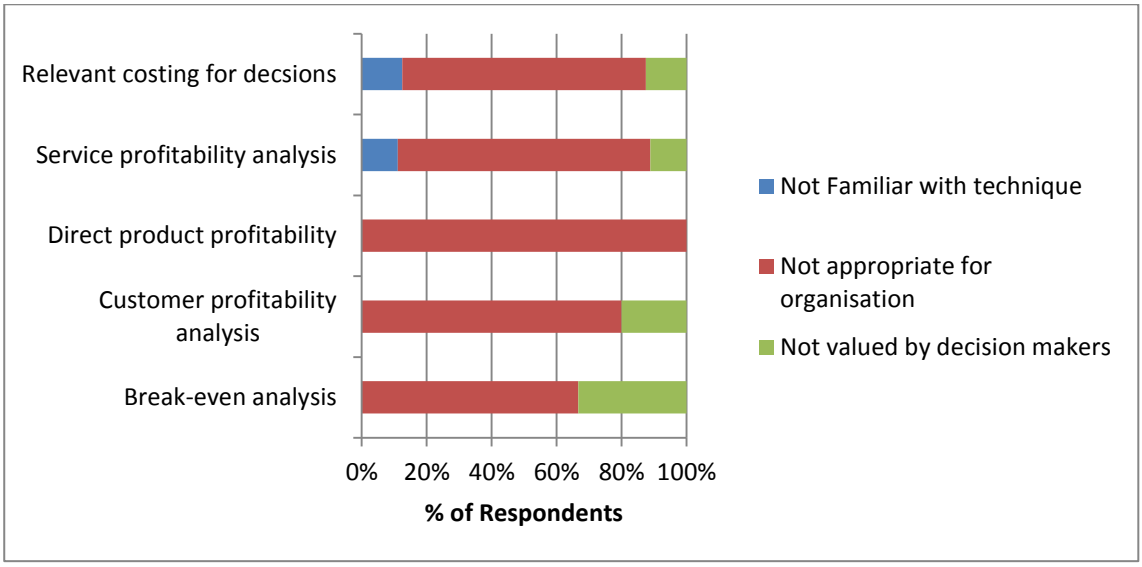


The data also shows that the organisations are using three out of five techniques regularly and 30% of the organisations are using all five of the techniques. The techniques appear to be widely used in most of the sectors particularly tourism and transport though these sectors represent the larger organisations and it is these that use the most tools. It is the small and medium firms which use the least number of profitability tools though they still include customer profitability analysis.

It is noticeable here that those techniques we would consider contemporary have been embraced by the respondents showing the highest overall usage for customer profitability analysis and high usage for direct product profitability. It can be concluded that where techniques can be easily seen as having direct relevance the take up of contemporary approaches appears to be high.

Additionally it can be seen from Table 6.14 that this category of tools has the lowest instance of unfamiliarity with no organisations stating they are unfamiliar with the contemporary tools in this category. This may indicate that there is no theory practice gap in areas where the tools are easily usable in a service sector context. The case study work will explore why the organisations have particularly embraced customer profitability analysis.

Table 6.14: Reason for lack of use of Profitability Tools



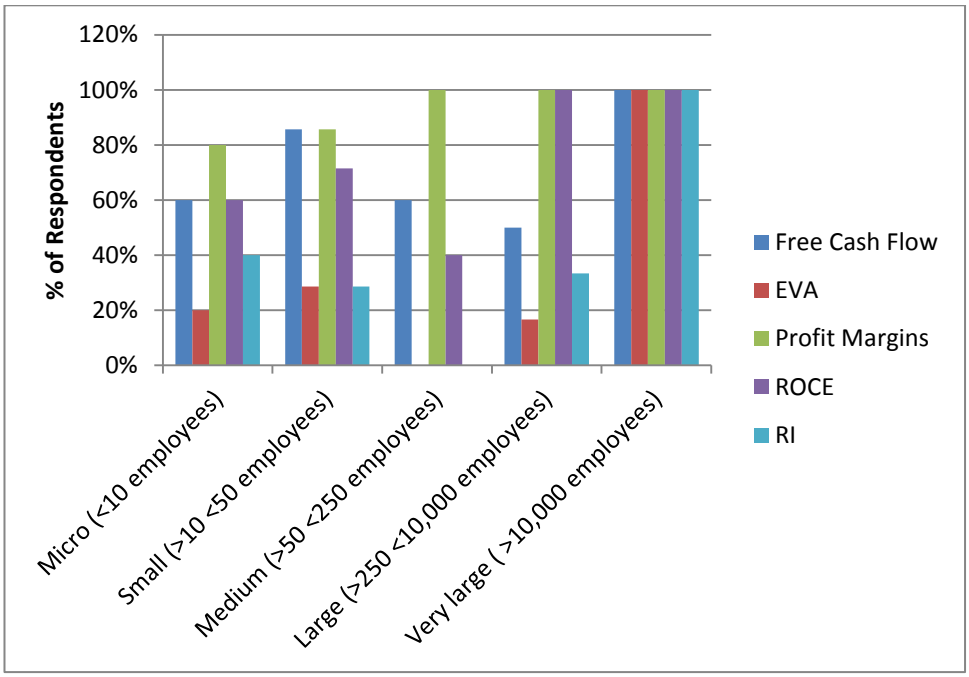
6.9 Managerial Tools

Managerial tools are designed to consider performance and how it is measured and managed within an organisation. This section has been accordingly split into these two subsections: Performance Measurement and Performance Management.

6.9.1 Performance Measurement Tools

Table 6.15 below gives an overview of what tools are being used to measure performance relative to the size of the organisations.

Table 6.15: Use of Performance Measurement Tools by Size



It is clear that all organisations are utilising profit margins as a way to measure performance – it was the top rated tool overall. Free cash flow and Return on Capital Employed (ROCE) are also popular with respondents. The respondents have little regard for the more recent techniques of Economic Value Added (EVA) and Residual Income (RI), these two techniques do not appear to be used at all in medium sized organisations whilst the largest of organisations with the largest number of accountants utilise all techniques equally.

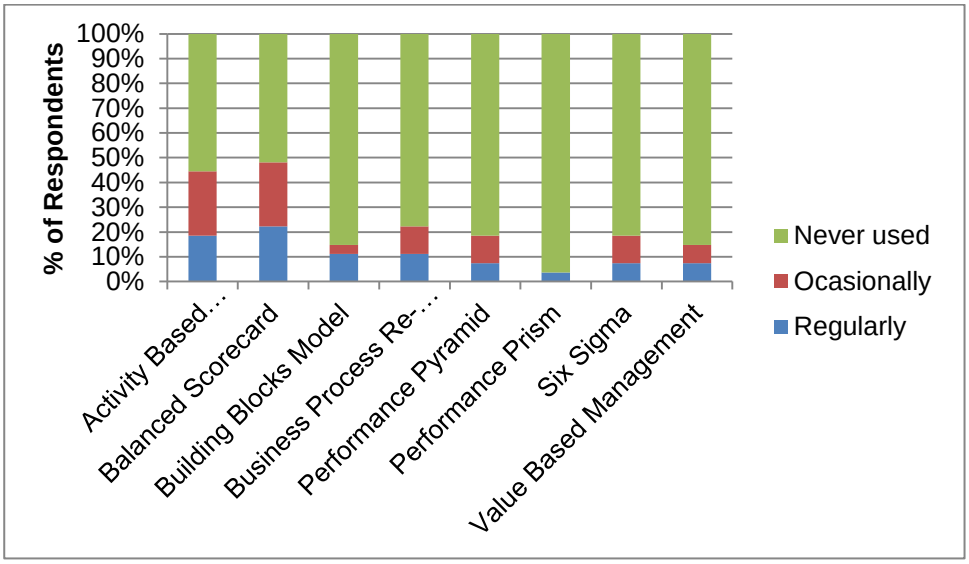
A further interesting observation is that one medium organsiation revealled that it no longer used ROCE or RI though no further explanation was given. The no longer used box was only used three times in relation to any of the tools used suggesting that once implemented tools are not easily dismissed or discarded by service organisations.

6.9.2 Performance Management Tools

Performance Management tools are not widely used within the service sector organisations surveyed as Table 6.15 demonstrates. These tools have the lowest usage of all of the areas considered and two of the techniques appear in

the top 10 least used tools list. The Balanced Scorecard achieves the highest usage of the performance management techniques with 50% of these organisations regularly or occasionally using this tool.

Table 6.15: Usage of Performance Management Tools



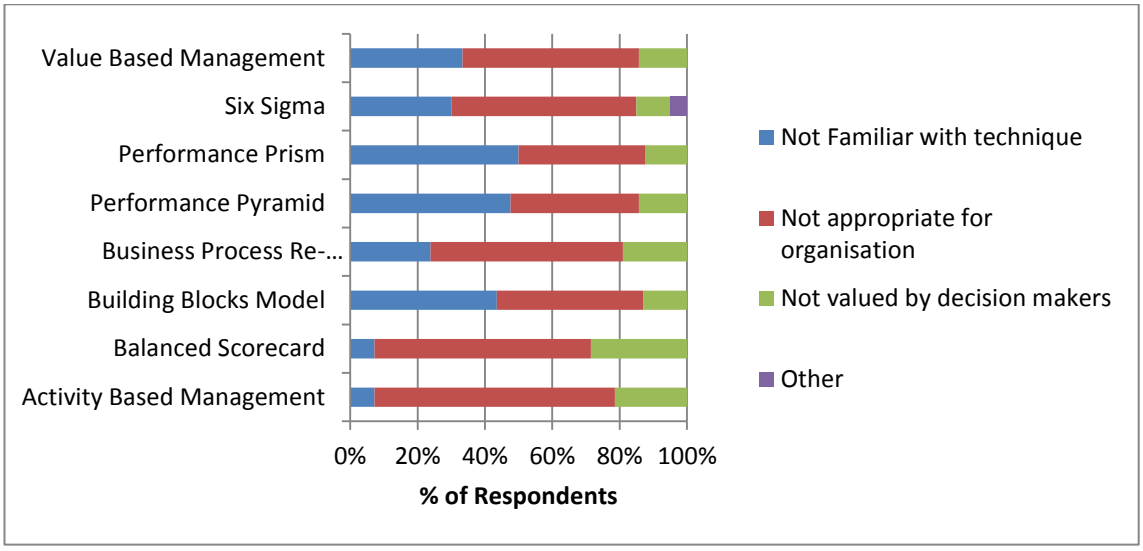
There is no discernible rise in tools used in relation to size, the micro organisations interestingly will regularly and occasionally use on average three measures whilst the small and medium sized companies utilise only activity based management and the balanced scorecard approaches. The larger organisations again as may be expected utilise all the methods at a higher rate.

On average only one of the eight tools is being used by the respondents regularly and specific service sector classification does not influence the results though the usage of these tools is slightly higher in the organisations classified as distribution, these include retailers and as such this result may be expected.

The lack of use of the building blocks model designed by Fitzgerald and Moon (1996) is interesting since it is a performance tool designed to be used in the service sector. This requires further investigation since it is possible that the respondents were unfamiliar with the name 43% of the respondents cited unfamiliarity with the tool as their reason for not using it. Respondents were also unfamiliar with the performance pyramid and the performance prism which are tools that do not appear to have had much attention academically so this

may be understandable. Table 6.16 below shows the reasons for lack of use in more detail.

Table 6.16: Reason for lack of use of Performance Management Tools

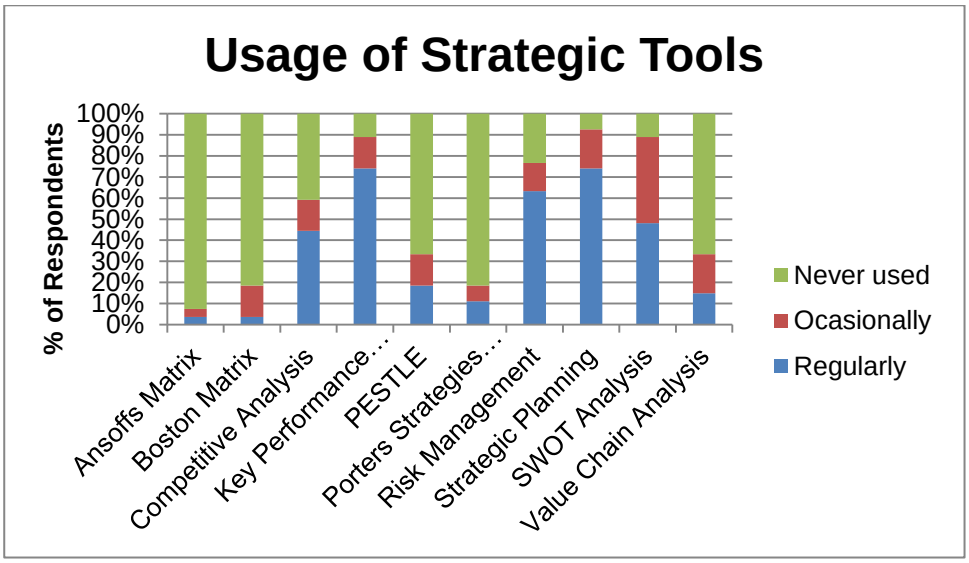


One medium sized retailer commented that Six Sigma is a tool that they would like to investigate but they have concerns over the resources and systems required to implement it.

6.10 Strategic Tools

Strategic management accounting tools are designed to give a broader degree of information to allow long-term strategic decision-making. Strategic Management Accounting (SMA) and associated techniques have become increasingly popular as a topic for academic discussion and surveys of use in practice (Langfield-Smith, 2008). The main tools used (Key Performance Indicators and Strategic planning) are amongst the most used tools overall with the highest adoption rates across all sectors and sizes of organisations.

Table 6.17: Usage of Strategic Tools



Ansoffs matrix however is one of least used tools and ranks highly in the top ten list of least used tools. A number of other tools do not appear to be popular. Porters generic strategies for example, are not widely used yet form a key pillar of the SMA discussion. The respondents cite their opinion that these techniques are not valued by decision makers in the organisation as a key reason for not using them.

On average the respondents use 4 out of 10 of the tools. There is no evidence to suggest that the larger firms utilise more techniques than the smaller firms and the smaller firms are prepared to use the more contemporary approaches in this area. Additionally there is an equal spread of tools in relation to the business category showing no distinction in what might be used relative to the nature of the organisation.

The results of this category again mirror those provided by Ross and Kovachevs survey in terms of the most popular tools, the average number of tools used and the fact that larger organisations show only a slight tendency to use more tools than smaller ones.

6.11 Additional Data

The respondents who were all accountants working in a management accounting capacity in their organisation were also asked a number of questions designed to gauge their opinion of management accounting and its position within the organisation.

The respondents were asked whether the roles of financial and management accounting were performed by the same individuals in the organisation an average score of 5.4 on the Likert scale shows that the respondents were in agreement with that statement and this is can be confirmed by the number of accountants working in each organisation, the only exceptions being the larger organisations. This is an important observation as it illustrates the demands on the accountants to provide a great variety of information and as has been noted from the literature review the demands of financial accounting requirements and external regulation mean that systems and processes become adapted to these requirements. In this respect barriers start to appear within organisations preventing the accountants from engaging with more innovative and contemporary tools.

The respondents were asked whether they felt that the management accounting function provides vital data to support both the operations and the strategy of the organisation.

In both instances the level of agreement was very high at a point of 6 for both questions. There are two outcomes from these questions to note, first of all the accountants perceive the information they provide as being of operational and of strategic value in the organisation and as such supports the view of many UK academics (Bromwich and Bhimani, 1989, 1994, 2010; Scapens 2006b) that management accounting did not stop being relevant in UK organisations despite the accusations made by Johnson and Kaplan, (1987).

The second point to note is that the accountants perceive the information they provide as being vital to strategy despite the fact that they do not embrace the more contemporary tools particularly those associated with strategic management accounting.

The respondents were asked whether they felt that the use of new management accounting techniques in the organisation, were initiated by the accountants themselves or by managers.

There was agreement that management accounting innovations were being initiated by the accountants themselves with a score of 5.2. This suggests that management accountants perceive themselves to have the power to enact changes to the management accounting tools used and introduce new tools to the organisation.

The accountants disagreed with the statement that change was initiated by the managers with an average score of 3.4 which confirms the view above about where the accountants feel management accounting change originates within the organisation.

The accountants were asked about the resources available to allow the management accounting function to perform satisfactorily. The average response here was 4.5 suggesting that whilst the accountants feel empowered to enact change they feel constrained by resources in terms of introducing innovations which may allow them to perform better. This is borne out by the comments made by the accountants in their evaluations of why they had chosen not to implement tools.

Finally the accountants were asked whether the management accounting tools were reviewed regularly in terms of their suitability for organisational requirements. The average response was point 5 on the scale suggesting that the accountants feel that there is adequate review of the tools used. It is interesting that given the level of agreement with this statement very few tools were highlighted by any organisations as no longer used.

This suggested that once a tool has been adopted even though a review takes place there is a reluctance to remove a tool from use. This also suggests that whilst there is regular review the lack of movement to engage with more contemporary tools shows a very slow approach to change which is consistent with Burns and Scapens (2000) work on management accounting change.

6.12 Summary of Findings from UK survey

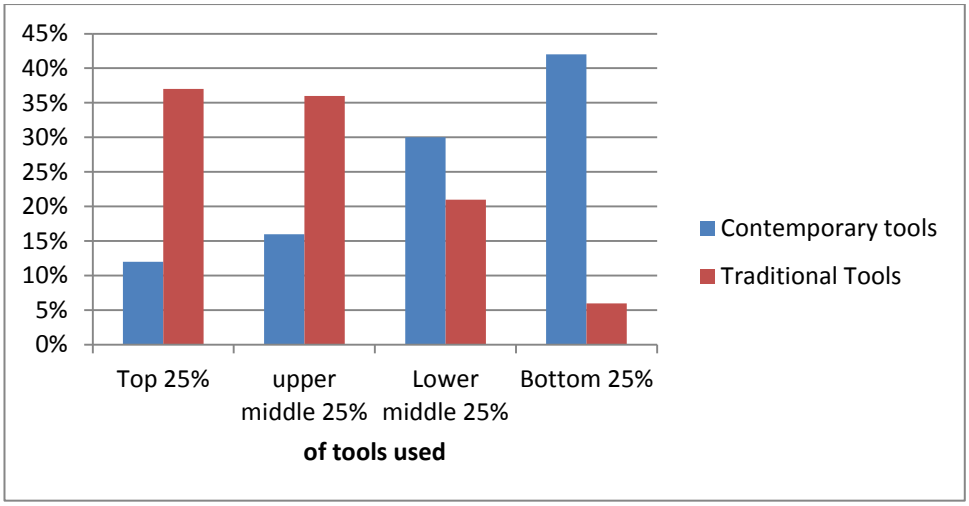
6.12.1 The extent of adoption of traditional and contemporary tools of management accounting in the UK service sector.

There is a clear indication that across the eight categories of tools surveyed there is widespread use from organisations of a range of sizes and from different service sectors. Table 6.5 shows the top ten tools regularly used and reveals the very high usage rates of these tools amongst the respondents and that the tools come from a range of the different categories showing that the organisations extensively use management accounting tools to support different organisational activities.

The findings also demonstrate that the most popular tools are not amongst those considered contemporary by this study. If the tools are divided 50% of the tools can be considered traditional and 50% contemporary.

A further analysis of the tools reveals that of the contemporary tools 42% of them are in the bottom quartile of tools used whilst only 6% of traditional tools are in this quartile. 12% of contemporary tools are in the top quartile of tools used whilst 37% of traditional tools are in this quartile. Table 6.18 below illustrates this data.

Table 6.18: Popularity of traditional and contemporary tools

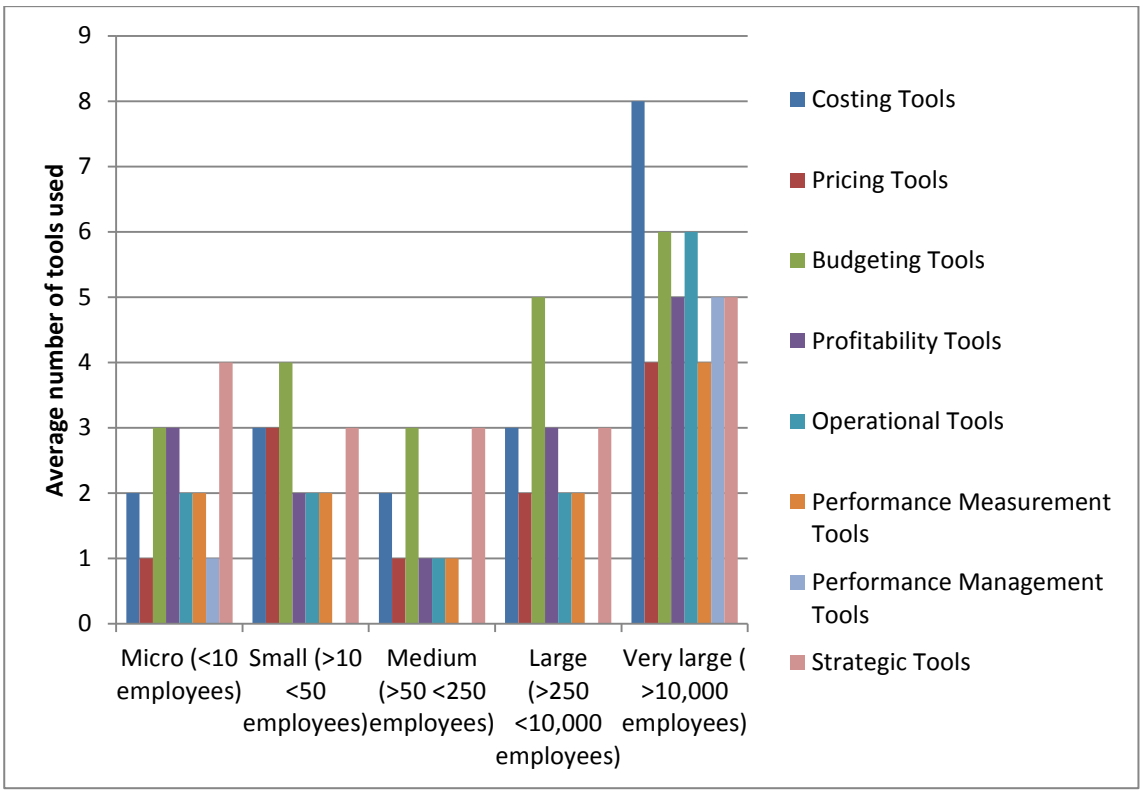


This data therefore shows that service organisations choose to continue to focus on those tools which are considered traditional and are slow to move to more contemporary tools.

In order to determine if there was any link between the tool used and the size or service classification of the organisation further analysis was conducted using a chi-squared test. In respect of both of these factors the null hypothesis was confirmed and therefore from the data it can be confirmed that there is no link between the tool used and the size of the organisation nor is there a link between the tool used and the service sector classification of the organisation.

However the following Table 6.19 clearly shows that it is the very large organisations which on average regularly use more tools than the other sizes of organisation.

Table 6.19: Average number of tools regularly used in each category by size of organisation.

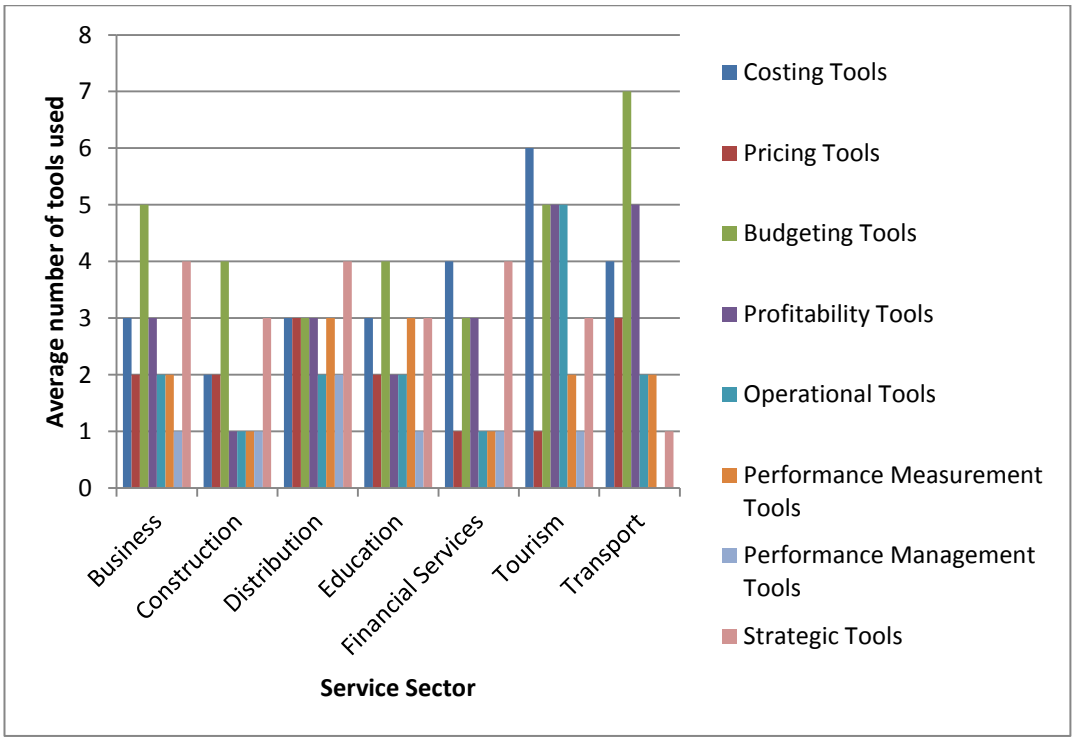


Additionally it can be noted that there is a disparity between the tools used by medium sized organisations and both the smaller and larger organisations. It is clear that the medium sized organisations do not utilise as many tools regularly

and do not use performance management tools regularly at all. Whilst there is previous empirical evidence to suggest that the larger organisations use more tools (Ross and Kovachev, 2009; Joshi, 2001; Chenhall and Langfield-Smith, 1998) due to the fact that they employ more accountants and will have the ability and resources to use more tools the same may not be said of the small and micro organisations. In order to investigate this issue further one of the small companies will be used as a case study and this may identify at least in that case the reason for the high level of tools usage.

In terms of service sector there does not appear to be any particular pattern between the number of tools used and the nature of the service provided as demonstrated by Table 6.20.

Table 6.20: Average number of tools regularly used in each category by service sector.



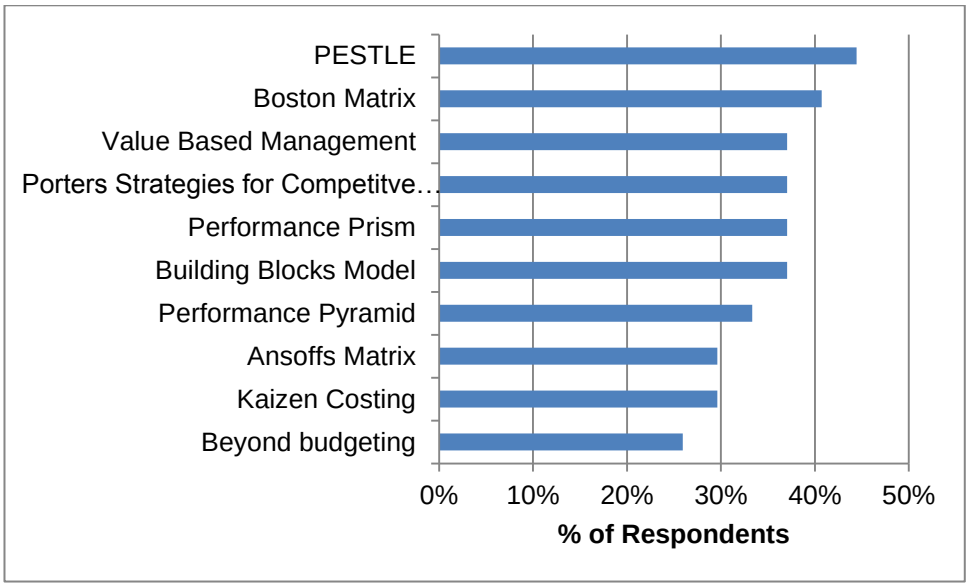
The only notable exceptions being the high use of budgeting tools in the transport sector and costing tools in the tourism sector. The use of costing tools in hospitality businesses in Greece was investigated by Pavlatos and Paggios in 2009 but failed to find extensive use of more than one or two organisations. Though Mia and Patiar's, (2001) study found a high volume and variety of

information being used for costing and pricing in Australian hotel businesses which would aid in corroborating the findings of this study. With respect to transport the use of multiple budgeting techniques is understandable given the level of variables which can affect firms costs and revenues from one month to the next (Longton, 2003).

In terms of addressing the normative elements respondents were also asked to indicate why they did not use techniques. The degree of unfamiliarity with techniques can be seen to be very high in the contemporary tools. Eight out of ten of the tools that the respondents were least familiar with were contemporary in nature and with a few notable exceptions such as ABC, CPA and the balanced scorecard the unfamiliarity score for all contemporary tools was higher than any traditional tools respondents were not familiar with, suggesting that unfamiliarity is not particularly aligned with the service industry context but more to do with understanding of the contemporary tools.

A further observation of the tools which respondents were unfamiliar shows that eight from the top ten come from the strategic and performance management tools whilst it may be claimed that some of these tools are not strictly management accounting tools they appear on all UK professional accounting syllabi and would be found on many UK university undergraduate and postgraduate programmes. Table 6.21 shows the list of these tools.

Table 6.21: Top ten tools respondents are unfamiliar with



These two factors help to perpetuate the claim of a theory practice gap in management accounting.

6.12.2 Comparison with other surveys

A number of surveys were analysed in the literature review chapter 2, section 2.6 and were presented in Appendix 2 as a summary. In particular the Ross and Kovachev (2009) survey was taken as a main comparator as it considered a variety of tools and addressed organisations in service industries as well as manufacturing.

There were a number of similarities found between the results of the Ross and Kovachev and this survey. Most notably was the similarity between the number of tools being used by organisations in each group of tools there was no significant difference in any of the groups suggesting that at least between these surveys there is a link between the number of tools organisations are likely to use from each category.

With regard to the most used tools both surveys contained four of the same tools (profit margins, cash forecasting, variance analysis and strategic planning). Ross and Kovachev did not provide a table of the least used tools but again in each category the least used tools are comparable with Table 6.6.

Within each category of tools there were again notable similarities between the usage rates of some of the techniques. In the costing tools category this was evident in the usage of variance analysis and overhead allocations. In the pricing tools category there were similar usage rates for market and cost-plus pricing techniques. In the budgeting category cash and rolling forecasts were the highest used tools as were benchmarking and customer relationship management in the other operational tools category. In terms of profitability tools, both surveys showed high usage of all the tools. In the performance measurement the low usage of EVA and RI was again consistent between the two surveys. In the performance management tools category both surveys showed that even the most popular techniques scored less than 50% usage by organisations and in the strategic tools again the same tools were considered high performers.

This high degree of linkage may well indicate that the inertia to change management accounting systems is more to do with isomorphism identified by Di Maggio and Powell, (1991) in terms of mimetic - copying other organisations and normative pressures – the influence of professional and university education (Granlund and Lukka, 1998).

In comparing the results of this survey with other surveys of management accounting practice based in predominately in manufacturing organisations and from a number of country backgrounds, the following observations can be made.

Dugdale 1994 compared his results to those of previous manufacturing based studies including Edwards and Emmanuel (1990), Bright et al (1992) and Drury et al (1993) and found striking similarities with them and which still hold true in the current survey including budgeting being a key activity (two of the top ten used tools in this survey are budgeting tools). This view of budgeting is consistent across a number of surveys including Chenhall and Langfield-Smith, (1998); Abdel-Kader and Luther, (2004); Ernst and Young, (2003); Hyvonen, (2005); Angelakis et al, (2010); Akbar, (2010); McLellan and Moustafa, (2011); Yalcin, (2012) and Sulaiman et al (2004) who compared results from other surveys across Singapore, Malaysia, China and India (Joshi, 2001).

The high usage of absorption costing and overhead allocation techniques and low usage of ABC is also widely reported in the surveys though country specific characteristics also appear in costing such as Hyvonen (2005) and Lukka and Granlund (1996) who found that variable costing was particularly high in Finland.

Benchmarking is another tool which receives high attention in the surveys showing high level of adoptions in a range of countries (Finland, Australia, Asia, UK, New Zealand, and Turkey) and is highly used in this survey. Dugdale (1994) also reported little use of quantitative techniques – linear programming was little used in this survey with 85% of respondents never using it (Drury et al 1993 reported 82%) later research tends to ignore this tool altogether.

A main conclusion in all of the surveys reviewed was that contemporary and strategic management accounting tools have a very low adoption rate in comparison with the traditional tools with only a few notable exceptions (CPA, benchmarking, BSC) which concurs with the view of this study. Yazdifar and Askarany, (2010) commented in their study only benchmarking (as a contemporary tool) ranked higher than traditional tools in terms of usage.

Many of the surveys (Hyvonen, 2005, Chenhall and Langfield-Smith, (1998), Clinton and White, (2012) asked respondents to highlight tools they felt would be important in the future or that they would be likely to adopt in the future these are consistent in highlighting many contemporary tools but as we move forward through the surveys the take up of these tools is not improving and they still appear in the lists of what organisations may like to use in the future this is particularly transparent in the Clinton and White survey of American management accountants which is a 2012 repeat of the Ernst and Young 2003 survey and clearly shows the same tools as being considered. Yazdifar and Askarany, (2010) do however suggest from their study that whilst the adoption rate is still low for contemporary tools they felt that it had improved over other recent surveys this is a view confirmed by Angelakis et al in 2010.

Using contingency theory to measure the linkages between organisational factors and use of sophisticated management accounting practice Abdel-Kader and Luther, (2008) found a positive relationship between size and sophistication

of accounting tools. Chenhall and Langfield-Smith (1998) also found a link between the size of organisation and the complexity of administration systems and they go on to suggest that the greater access to resources that larger firms possess results in their ability to experiment with recently developed accounting practices. Bogale (2013) however found no link between firm size and technique used in her Ethiopian study. This study could find no specific link between size and individual tools but did find in line with other research that the number of tools used was relative to the size of the organisation (Innes and Mitchell, 1995; Shields, 1995).

Dugdales'(1994) conclusions reflected that at that time he felt there was a gap between theory and practice though recognising that not all theory can be put into practice there was a case for a narrowing of the gap. Joshi (2001) concluded that the rate of adoption of contemporary tools was very slow this was also recognised through the literature relating to management accounting change such as Burns and Scapens, (2000). Given the level of unfamiliarity with a large number of contemporary tools in this survey the author would concur with the view that management accounting change in terms of usage is slow and that there may be an education-practice gap still evident.

6.13 Chapter Summary

Several main findings have emerged from this survey in comparison to other surveys of management accounting practice.

The use of management accounting practices within service organisations appear to focus heavily on traditional tools with 80% of the 10 most used tools being in this category.

The use of contemporary tools is consistent with that of other research and lags below the traditional tools in terms of usage. There is evidence as supported by other academic surveys that some of the contemporary tools have become popular in a service sector context including CPA and benchmarking.

There is no evidence to support the hypothesis that either size or service sub sector influence the choice of individual tools but there is a clear indication that the size of firm influences the number of tools used.

The degree of unfamiliarity with contemporary tools particularly those with a performance management and strategic perspective, indicate that there is theory practice gap in relation to the service sector, specifically an education-practice gap.

Service sector accountants hold the view that the data they provide is vital to support both operations and strategy in their organisations and that they feel they have the power to make changes with respect to using contemporary management accounting tools.

It is evident from the responses made that the management accountants perceive barriers to their ability to implement change in the form of resources particularly.

The findings of this study should be viewed with respect to their limitations. The sample of this survey whilst representative is small and therefore it is difficult to make generalisations about all organisations in the service sector of the UK. It is based on UK only respondents and so cannot be easily generalised to other countries.

Whilst a large number (66) management accounting tools were investigated it should be recognised that this is not an exhaustive list and other tools could have been included in the survey.

The design of the survey prohibits the asking of supplementary questions which would have aided the exploration of interesting areas and also which could have avoided inconsistent responses. As such a more detailed case study approach would be required to investigate the findings of the questionnaire in detail in a specific organisational capacity.

The next chapter undertakes to further explore the findings of the questionnaire using five case study companies specifically to understand how tools are used and why and how tools are adopted in the organisations.

Chapter 7: Case Study Findings and Analysis

7.1 Introduction

This chapter will present an overview of each of the five case study companies in the study and provide the initial findings from each of the interviews conducted these will reflect the descriptive elements obtained from the interviews in relation to what and how management accounting techniques are used in these organisations as well as how the use of contemporary management accounting tools have been introduced over time. The initial findings of the perceptions of the management accountants, in relation to barriers and enablers of change, to tools used and their perception of the role of management accounting education, in relation to change is recorded under each case. Following this the cases will be drawn together using a strong structuration approach to provide a lens with which to evaluate the responses of the accountants interviewed.

In each of the cases the agent in focus is an accountant in their organisation they are either the chief financial officer/financial controller or a senior management accountant. In the analysis they have been given a reference of either AC or MA depicting that they are a qualified Chartered Accountant or that they are a qualified Management Accountant and a number which relates to their case company.

7.2 Case 1

Case company 1 (CC1) is a new and used car retailer which is franchised to the Volkswagen group. The company was founded in 1960 and to date has been a family owned and run business. The company's core values are to deliver excellent customer service whilst being successfully managed and valued by employees.

The business is organised as a head office with 15 dealerships which sell Volkswagen, Audi, Skoda and Bentley cars and Volkswagen vans. It also has a

dealership dedicated to fleet vehicles as well as two parts centres. In total the organisation employs over 700 people.

Its key financials show a business which continues to increase turnover year on year and it has grown by 300% in the last 10 years and has a return on capital employed which has doubled in that period.

The management accounting function is decentralised and accountants (known as dealership accountants are placed in each of the larger dealerships where they oversee the financial operation of those plus one or two additional smaller dealerships sometimes with an assistant. There are two divisional financial controllers and a chief head office accountant. The majority of the accountants are ACCA and CIMA qualified (or studying towards) and the assistants studying towards or have completed the Association of Accounting Technician (AAT) qualification.

The dealership accountant is part of the senior management team of the dealership along with the general manager and the sales manager.

The dealership accountants have the responsibility of producing monthly management accounts for their dealership(s) which are sent internally to the financial controllers and also externally direct to Volkswagen group (VG).

The dealership accountants also have a financial accounting role within which they complete the year end accounts and ledgers, deal with accruals and also credit control. The accountants work closely with the sales teams to make sure that all aspects of car sale are accounted for.

The standard and routine tasks on a monthly basis include budgeting, and variance analysis. The budgeting is done on an incremental basis with some adjustments made to account for changes due to new models or specifications of cars being introduced or phased out. Some of this is based on evaluating current market conditions within the dealerships but the majority of the information is fed down from VG. They have set parameters within which the organisation has to work so there has to be a relationship between car sales and services and parts. If the targets set for services or part sales do not fall

within their automated parameters then budgets are returned by VG for amendment.

In order to produce the sales data for the budgets the dealership accountant works closely with the sales manager working from a selling price and together they evaluate and add appropriate overhead costs to check that the sales will be profitable and within company and VG targets.

Each dealership (or group of dealerships) is responsible for controlling their own costs and deciding on the labour costs. However the degree of control is still limited by VG as they have set parameters within which they expect salaries to fall so if the dealership wanted to take on a master tradesman they are constrained on the maximum salary that can be offered. This even extends to back office staff such as the administrators and the accountants.

Variance analysis is the main tool which is used and reported on a monthly basis by matching actual against budget. Variance analysis is not made on a standard cost basis but is done by flexing the budget. It is possible then to drill down to see where changes have occurred and evaluate the reasons before forwarding the reports for internal examination to VG. Budget changes can be made on a rolling basis to take account of changing conditions but again these are made in agreement with VG.

In terms of performance measurement everything is based on KPI's and profit margins, these again have tended to be set by VG. One change that has occurred is that in addition to the information pack from VG the company itself has set KPI's and introduced them at the dealership level this has given greater autonomy to the dealerships to evaluate the relationships between the different income sources and how they relate to each other such as how much of parts income is generated by services on a monthly basis. The management team of the dealership have monthly meetings now within which they discuss and plan for these KPI's amongst others such as customer satisfaction and quality of service. This has resulted in more, lower level involvement into managing the performance of the organisation, has improved the commitment of the management teams and has been better for the business as a whole.

The accountant (MA1) remarked that on reflection the approach might be considered very traditional though there was an element of tailoring towards the specific service setting reflecting the link between different elements of the service they offered which could be sold as a key difference from the way they had analysed sales and made sales forecasts in a manufacturing setting.

In terms of what might be considered contemporary tools the accountant was clear that in terms of contemporary approaches, the operational level ones were not considered appropriate for the organisation mainly due to the fact that methods were enforced to a large degree by VG. "There seems little point in veering away from the systems they have in place running two different systems would not be cost effective and would be confusing for the dealership teams" (MA1).

Areas where contemporary tools are used reflect the performance management, where the company can add their own measures to those required by VG and where VG supply appropriate data such as for KPI's and benchmarking. Customer relationship management (CRM) is undertaken as is direct product profitability based on models and specifications but again there is little scope for utilising this information unless it is linked to the strategies promoted by VG, "for example it would be impossible to offer our own finance deal this has to come from VG" (MA1). In spite of the influence by VG the impetus on a dealership level to interpret and act on CRM information and has given the finance and sales teams the opportunities to work together to target customers and offer them profitable deals within the confines of VG parameters.

The company has clear strategic aims and the senior management team continues to prioritise the key areas where the organisation can develop and grow but this is in consultation with VG so very few of the performance management and strategic tools are utilised independently of VG.

The accountant when asked to consider the change in the role responded that there had been very little change over time except in relation to the increase responsibility of the dealership accountants and the management teams at the dealerships.

They indicated that the role is very much one of routine “you do the budget, you monitor the variances and evaluate performance, but there is no impetus for change, you can undertake strategic planning but management accounting comes back to budgets and forecasts. It is all orientated to financial outcomes” (MA1).

The accountant was very mindful the effect of management accounting change on others in the organisation and the way that any new ideas about the way management accounting could be undertaken would be perceived by those senior in the organisation. “There have been times when I could have suggested change, but you have to understand the bigger picture, what will be the impact on the dealership accountants and the management teams of the dealerships?, what will be the impact on the financial controllers?, you feel that you don’t want to rock the boat” “if I suggested a change to the budgeting process that would result in the retraining of over 100 people” They added “I would feel I need to show detailed reasons why something would work, significant financial outcome and ensure swift integration in order to offer a change”.

In terms of education the management accountant in CC1 is a qualified CIMA member and has been qualified for over 20 years. The accountant was familiar with the tools listed in the questionnaire from their previous studies but has felt that none of the tools discussed as contemporary have effectively been put into place in any organisations they have worked (anecdotally all service organisations). “Even at the senior management level where you are conducting strategic planning you don’t seem to use your management accounting knowledge”

The accountant perceived a Continued Professional Development (CPD) gap, reflecting that on the whole they tend to be orientated in two key areas those which are technical updates or reflect soft skills. “Where I have been on workshops, like education generally there is a focus on manufacturing nothing seems to be focused on service”

They added “In the current economic environment courses which cost resources in terms of time and money to attend have to be good value for money”

7.3 Case 2

Case company two (CC2) is an internet based wholesaler and retailer. The company was founded in 2007 and is a family run organisation. Its key mission is to provide expert knowledge and service to its customer group.

The company is very small employing 15 people in total, who are all located in one head office facility. The company structure has a managing director who oversees all strategic and operational areas with a financial controller some sales technicians and a team of dedicated warehouse staff

The company has grown over the period and has become one of the top 5 independent specialist retailers in its field.

The accounting function has consisted only of the financial controller (FC) who is a chartered accountant (ACA), though in the last 12 months an assistant who is training to be AAT qualified was taken on.

The accounting function of the organisation spans a number of routine financial accounting and management accounting tasks. From a financial accounting perspective it involves the maintenance and interrogation of purchase and sales ledgers the production of data forming the annual financial accounts and production of tax reports. From a management accounting perspective the main tool used regularly is the cash budget. The cash budget is used as the basis for forecasting, costing and for evaluating the performance of the business. In addition to the cash budget sales forecasts are produced but the small size of the organisation means that items such as master budgets are too inflexible for use. Occasional use was made of detailed product budgets for high margin stock in order to increase sales and profit growth.

The business carries over 100 product lines at any one time which are sold to both wholesale and retail customers. All pricing decision making is overseen by

the managing director (MD) who is also ACA qualified. The main pricing mechanisms used are cost–plus pricing based on the purchase price from the distributor and adjusted to include a cost and profit mark up. More regularly due to the competitive nature of the business a price is created based on looking at the competitor's prices giving some consideration to the overheads of the business. Penetration pricing is also used regularly but at this point decision making largely ignores cost altogether in order to generate a "buzz" in the market. AC2 "We often don't have time to consider overheads, sometimes the price does not even cover the cost to us from the distributor, if the price covers some overheads then we are lucky!"

When new products are added to the range there is some consideration given to covering costs but the accounting function is stretched and there is little time to create meaningful data. AC2 "management accounting data is not regularly used to make decisions in relation to pricing. It would be great to have the time to calculate a breakeven on a product but there just isn't enough time to do even these tasks that others might consider routine"

The use of the tools which have been in place for some time, stem from one of the key characteristics of a small business which is to focus all financial activity and data around the cash position of the organisation. AC2 "The business has mainly been run on the basis of identifying what money has to be paid out – if I have to pay a distributor by Friday the emphasis is on what products can be promoted and sold in order to meet that payment".

In terms of change to management accounting systems the changes have largely been driven by problems created through lack of controls set up in the business.

In relation to products the controls in the warehouse which were outside of the remit of the FC were lacking. The issue came to the attention of the MD through poor quality control and customer service. Complaints were being made by customers who were receiving the wrong goods or receiving delays in the receipt of their goods. An investigation found that the goods were not being coded or recorded on their receipt into the warehouse and the staff were taking longer than appropriate to located goods and since a number of product lines

were similar there was regular confusion over which product line the customer had requested.

In order to improve the system it was necessary to employ a system of stock keeping. The solution that was undertaken by the MD was to purchase new software which was an integrative management information system with capacity to deal with stock and produce detailed financial and management accounting information.

The immediate result of using the system for stock control meant that the warehouse staff were more productive as goods could be sourced quicker, customer complaints dropped and at peak times when temporary staff were necessary it was quicker and easier to train them.

The new system was also capable of providing data which could be interpreted and utilised in relation to contemporary tools of management accounting however the system was not being used to its full potential until a further problem was discovered where competitors were undercutting the company's prices. The solution was found by the MD speaking to companies in a similar market and finding out what they were doing and what systems they had which the company then mirrored. AC2 "The innovations came from others not from considering the latest management accounting tools".

Following the research the company was able to use the data generated from the system to engage in CPA and CRM activity. Using a CPA approach the company considered its main customers who were wholesalers and evaluated the statistics in relation to them. Following this the wholesalers were separated into five graded categories and discounts were applied to them on that basis. Using the CRM tool the company was also able to identify which customers it could offer bigger discounts to in order to regain the advantage over the competitors. It also helped the company focus on groups of customers and as such further efforts were made to increase the proportions of sales to retail customers where it was possible to achieve a higher margin.

Performance measurement was an activity of the business which has developed over time to include KPI's for wholesale sales and other customer focused areas using information provided by interrogation of the new software.

In particular targets in relation to distribution channels were put in place following a further problem encountered by the organisation. Distribution channels such as Amazon rate sellers in their market place on their ability to achieve dispatch targets to customers. If sellers do not meet the dispatch targets their rating drops. If the rating falls below a threshold then the seller is suspended from selling through that channel until they are able to restore their rating. The company did not have targets in place and as such slipped down the rankings. The use of targets monitored using the new information system allowed the organisation to regain its position and continue to sell through this channel.

The strategic direction of the business has tended to be short term focused dominated by the MD with an emphasis on who the customer is and what the customer wants. The FC provides key data on costs and prices in order to steer strategy however it has not been a priority to utilise management accounting information at a strategic level because it would be a long-term term investment.

The FC reflected on the contemporary tools and changes to management accounting in the organisation "many changes put in place have been reactive to firefight problems not to improve systems" (AC2). The FC goes on to add "I have been given free rein to improve the financial controls and the cash management however I have not been given the time and resources I feel are necessary to improve the systems further."

The FC believes that change is only possible through good communication and a manager that is open minded and willing to listen.

In terms of education the FC who is ACA qualified believes that there is a gap between education and practice. AC2 "you learn the basics but when you get into a company you learn from the people around you" "this is particularly true of a service setting, you have to learn what the business does and you adapt to that and build on your basic skills"

The FC believes that CPD has an important role particularly linking all of the UK professional bodies together through conferences and CPD “to allow people to learn a variety of new skills. Accounting skills should be transferable” (AC2).

The FC believes that there is a willingness to learn on behalf of accounting staff but that they are hindered by several factors. Terminology is a key factor understanding the terminology “I actively research and read journals and magazines but I was not familiar with all of the tools in the questionnaire list”. A second factor is acknowledging that is what you are using. AC2 “if we do something it is by accident not because we actively choose to look for and use a tool”

7.4 Case 3

The third case company (CC3) is a global telecommunications company. The company was founded over 130 years ago and is based in the USA, with 8 subsidiaries which deal with different areas of the world, one of which is based in Europe. The European subsidiary (ES) has its headquarters in the UK and it is this subsidiary that the case is concerned with.

The ES has links in 31 countries across Europe supplying business customers with 24/7 care including internet and telecommunication access through its network.

The ES employs over 5000 staff of which 1500 are located in the UK. The subsidiary is organised in a matrix structure with accountants serving business lines which involves reporting to account managers who liaise with clients and also to the European financial controller. There are also accountants serving legal entities (usually countries) though a hierarchical structure consisting of a financial accounting controller, two financial accountants, 8 entity controllers and under them 10 financial analysts.

Because of the matrix structure even though accountants are called financial or business line they both perform routine duties which can be considered management accounting in nature.

The structure can be difficult to manage as there can be a miss match between the work of the two groups. This happens where discounts are offered to clients, which in turn, affect the revenue reported in the legal entities in countries and these have to be matched up and checked for legitimacy. The two teams work out of the UK though the business line team had been located in France for some time. The accountants are all qualified though there is a mix between ICAEW, ACCA and CIMA accountants in the organisation. In this organisation the accountant interviewed was an entity accountant and is ICAEW qualified.

The accountant recognises that the work of both teams is fairly routine, not overly innovative and that the work has a financial accounting emphasis. The two main traditional elements of management accounting are budgeting and overhead allocation.

In terms of budgets these are done on a top down basis with data originating in the parent company. The annual budgeting process has remained a very large part of the organisation for some time though there has been change through the use of rolling forecasts and the use of better software over time. Variances from budget to actual and month on month actual to actual is reported both via business lines and entities with little use of standards for costs.

Pricing is very market orientated and focussed on client groups, there is heavy competition in the marketplace and guidelines are issued by the parent company. Transfer pricing is a very important element of the business as the rental of trunk lines are often shared by a number of entities as is client income.

One of the main foci for management accounting on a regular basis is the allocation of costs between client groups and across entities. AC3 “cost allocation is a very time consuming and tricky job given the complex nature of the business. I have seen a team of 5-10 accountants working on that regularly”.

The nature of the business means that even the most traditional of tools have had to be adapted to suit the nature of the business and the complex organisation structure. The overhead allocation in particular has had to be

robust and transparent in the transfer pricing between country entities for the tax authorities and as such there is an orientation and adaptation in order to meet legal requirements on a country by country basis.

The organisation as a whole has embraced new management accounting tools and techniques though these tend to be initiatives which are started by the parent and may involve people from across the subsidiaries in cross-sectional teams.

Specific innovations have included environmental impact and cost reporting which involved a variety of staff and which drew on the work conducted by the financial accounting team in terms of the general ledger to pull details of materials, labour and other costs which had an environmental impact and activities which had an environmental impact and use this information in order to control and reduce costs. There have also been a number of ABC/ABM initiatives which have highlighted areas where cost reduction and more efficient operations could be achieved. Benchmarking is also an area of innovation with the 12 step plan which brings together the teams in relation to clients and benchmarks best practice

An area which is particularly important at the organisation is CPA and CRM. This is fed down from the parent and is combined with other activity based approached at a business line level to enable best prices and margins to be achieved with corporate clients.

It is clear that there are a number of innovations being utilised and which bring together teams from across the organisation but they are directed from the parent companies. AC3 “very little of these innovations affect the day to day tasks we complete”. In particular strategy is driven by the parent and in subsidiaries there has been little direct encouragement to be innovative.

The accountant recalls one specific local change that they were able to bring into the organisation some time ago which was cash budgeting in relation to the requirements of the entities in countries. At that time the treasury department was divorced from the entity accountants and they were not able to see the bigger picture of the cash requirements of individual countries due to the

complex nature of telecommunication trunk line rental. Routines were introduced to rework cash budgeting on an entity basis in order to better predict the cash requirements, this in turn resulted in better communication and the drawing together of different accounting functions within the subsidiary.

The accountant reflected that this was possible due to a local understanding of a problem and the ability to get clear communication with the manager and through to the parent in order to enact the change in role.

In terms of their experience and attitude to change this particular accountant perceives that innovation and change depend on the relationship with the manager and the managers open outlook to new ideas. AC3 “My manager [when I was a new accountant in the team] was very up to date, but had little resources to allow himself or us to go on training courses. If my manager sent me on a course I knew it was important enough to change what we were doing”.

The accountant also recognised that the accounting teams are working at full capacity and that there is little time to be more innovative when all your time is spent on the routine jobs that have to be done. AC3 “as a new accountant in a business you are willing to learn but are constrained by the confines of the role and what you are told to do. There is little emphasis to change unless told to from above.”

In terms of education the accountant reflected that in a large and complex service environment the practical reality does not reflect the training provided and “you rely on the experience of others already in the organisation to tell you how it works”. They also made an observation on new staff joining their team that there is an emphasis to use the technology to communicate “X sits 200 yards from me but will send me a personal message on the computer asking a question, the answer to which may well be a yes or no, but by not getting up and communicating with others in the department and related departments there is no real understanding of why the answer may have been yes. New staff seem to miss the contexts within which they are working as a result” AC3.

7.5 Case 4

Case company four (CC4) is a sporting and leisure company that owns and manages major events sites around the UK. The company was formed in 1964 and has grown over the years to add more events sites to its portfolio. The organisations key mission is to run its commercial operations in the best interests of the sport it serves. The organisation is a subsidiary of a larger UK organisation with other subsidiaries attached to different aspects of the sport.

The organisation has a head office based in London and 15 sites around the UK. It has over 500 employees spread between its head office and the UK sites.

Its key financials show an organisation which has doubled its turnover in the last 10 years and maintains a healthy return on capital employed. In the last financial period alone it increased turnover by 11% exceeding targets and was well above the growth of the UK economy. Its growth has been funded partly by the first retail sporting bond which generated £25m towards a £45m redevelopment plan for one of its facilities with further capital injections into others of £7.5m.

The accounting function is organised in a divisional way with a small head office accounting team and a recently reorganised structure of grouping by region with support staff at each venue. The change of structure has given the accounting teams in each region greater control for reporting and generating income and controlling costs within each of their venues.

Each regional team is responsible for financial accounting duties producing an income statement and balance sheet on a quarterly basis and their own accounts at year end with audit schedules all of which are sent to the head office for consolidation.

The team is also responsible for management accounting data which is produced on a monthly basis and mainly reflects working with budgets and variances from actuals. The budgets are revised on a rolling basis quarterly as this suits the seasonal nature of the organisation. The budgets are produced from a mainly incremental perspective with targets for different elements of

sales set from the head office and specific regional and local economic data influences the forecasts.

The use of variance analysis is conducted on a budget to actual basis and does not reflect a link to standard costs. Variances are analysed monthly and explanations and revised actions are made to the quarterly rolling budget as a result.

The reporting process has improved and changed over time. The organisation was slow to introduce computerised accounting software and developments have been in conjunction with changes to the computer software used. This has enabled the head office to take a more strategic role where they can access key real time data relating to the regional areas.

Pricing is done in a variety of ways which again is linked to the changing nature of the organisation. As is typical of service organisations the number of services offered at a venue have increased over time as a supplement to the main sporting activity provided. There has been a drive to improve these secondary sources of income and they now make up 15% of turnover. Each region is responsible for running additional events and setting prices in conjunction with events promoters. Much pricing is done on a cost-plus basis in relation to the main event activity or market driven basis in relation to non-traditional activities.

Performance is measured in relation to a number of factors particularly those which are customer facing most is done on a KPI basis and a management pack is used on a quarterly basis. Most of the tools used are relatively straight forward in relation to target profit and efficiency. The use of more integrated software over time has improved the performance reports that can be produced. The accountant (MA4) recollects that there were changes to the performance reporting requirements introduced with the appointment of a new finance director who came from a manufacturing background. The emphasis they brought was based on more visual information for which more detailed explanations of achievement or deviation from expectations was required. There was an increase in the usage of the management report data as a result.

The accountant reflected that whilst the restructuring of the organisation has refocused some of the activity in terms of ability to provide more detailed information on a regional basis which has a clear link to informing strategy and future direction of each region, the basic day to day tasks are still performed in a traditional way. They were also able to reflect that over time there had been small step changes in the way tasks were preformed and the emphasis of evolving strategy being introduced from the head office and influencing the way in which the individual events locations performed. MA4 “over time there has been change in the way each events location thinks about and budgets for its income. The sources of revenue are expanding over time as we aim to weather economic conditions.”

MA4 “Whilst changes have not been dynamic and we cannot say we have widely introduced new tools we have adapted to the changing leisure market with what we have done”.

In terms of the direction of the change the accountant reflects that the main changes have been driven from the head office and strategic decisions but that there is a clearer two way process whereby information and actions at a lower level are seen to have an impact on the strategy. There has therefore been scope to be innovative in terms of event management and cost control at a venue level as a result of the decentralised structure whilst maintaining the same reporting mechanisms.

The accountant reflects that there have had to be subtle adaptations to the tools used to fit with the context of the business and that in terms of education their studying of CIMA did not aid them when entering a leisure industry organisation. The accountant believes that texts and classes still relate to manufacturing and that little has been done to help service organisations. MA4 “there has been a great deal of interest in Japanese techniques as new developments but they are related to manufacturing” “The [CIMA] qualification could be changed in Europe to better reflect the service orientated markets that now dominate.”

7.6 Case 5

Case company five (CC5) is a book retailer in the academic sector. The company was founded in 1879 and still remains a family owned company today. It has grown significantly over the years since its founding with one shop to having over 50 retail outlets all across the UK and was the first bookshop to launch a successful online arm in 1995.

The organisation has a head office based in its flagship store and 40 permanent shops across the UK as well as a number of temporary shops on university campuses. The organisation employs over 500 people across all of these locations.

It has been financially stable for a number of years despite the growing competition from online retailers such as Amazon. In particular it has improved the return on capital employed and profit margin. Whilst continuing to invest in the latest technology to support changing buyer patterns.

The accounting function has 16 people in total, the team that deals with management accounting is small consisting of the chief financial officer (CFO) who is ICAEW qualified with a management accountant (MA), (who is just completing the CIMA qualification) and an assistant to the management accountant who is an AAT trainee.

The organisation is decentralised and each of the shops is responsible for producing their own management accounts. Each shop produces its own profit and loss forecast and head office sets the targets within which they must work including the trading contribution they are expected to make. These forecasts are rolled up to the head office and a full consolidated version is produced. The shops work as profit centres so they are able to control their own costs as well as arrange their sales promotions to meet the trading targets set.

The MA is responsible for producing the budget and the management accounts. The budget is an annual one there is no rolling forecast but there is a three year plan which is worked towards. The budget is done on an incremental basis based on last year and targets set by the senior management team based on the three year business plan. These are then devolved down to the shops with

guidelines for completion via a spreadsheet and then back up when completed and checked for realism before being consolidated.

Standard costing and variance analysis are other tools used regularly in the business. Standards can be created per shop or per publisher using a cost-plus or standard cost with value added. Margins are tied to publishers and their retail prices and discounts are negotiated with them and also the universities which mean the company is squeezed in the middle due to factors outside of their control. Variance analysis is conducted by comparing actuals to budgets and forecasts using gap analysis in relation to sales prices, sales mix, price discount, age etc and is very detailed. Managers of the shops are close to what they are doing which means that variances can be analysed on a week by week basis and corrective action can be taken quickly.

The organisation recently put in place a new finance software system which has enabled reaction time to improve. The MA is able to analyse the data from the new software and see the what, how and why much more quickly.

The CFO confirmed that at the operational end of the business where there is the decentralisation to the shops the work conducted is very traditional in nature but at the more centralised end of the business where there is a more strategic influence there is greater use of more contemporary tools.

The CFO elaborated as to the reasons for sticking to traditional tools at the operational level. AC5 “The shop managers are not accountants and they need to understand [budgeting] through the basic spreadsheet. We don’t feel we can ask them to do anything more complex. It would take them off the shop floor and that does not help with a customer facing business”. The CFO went on to add “If we make a change it is a choice between doing the work ourselves or extensively retraining the managers” The CFO would like to implement a system of rolling forecasts but this has to be managed carefully and change needs to happen with “baby steps”.

The CFO is of the opinion that to make major changes at an operational level would involve the need to recruit more management accountants so there would be one in each shop or perhaps group of shops and this would require

both extensive monetary and time resource. The CFO also added that the ability to undertake the accounting work is not the only function of the shop managers but there is a need for people and customer skills that may not be developed in newly qualified accountants.

The current decentralised system has not always been in place. 5 years ago the accounting was centralised in the organisation and out of the hands of the shop managers. AC5 “They [shop managers] did not really understand what was going on – they understand it now and we have their trust. To change systems may break that trust”.

In turning to the contemporary tools it is the new software which has generated the data to make it easier to adopt these. Performance measurement, the use of KPI’s and benchmarking have all become possible and easier to use as is a scorecard approach to the KPI’s. The scorecard is very financially orientated but there has been movement to expand this to include customer and quality data.

CPA and CRM has become possible with the new software and changes have been implemented on a case by case basis bringing the operational and strategic picture together since the organisation is influenced by market and business environment changes.

The decision to use the new software came as a result of the strategies required to compete in the market with competitors using different sales platforms. The organisation realised it had a unique position in the market and collected data which the software would allow them to analysis and of which the competition was unaware.

There has also been the ability to use elements of new tools such as ABC without wholesale change to new systems. This technique has been used in the business to identify areas where costs are high and the reasons why. When this has been communicated in straight forward terms to the shops, managers have been able to change their actions and initiate savings. An example of this is the recent research conducted into the cost of using cheques which resulted in better capturing of bank details at a shop level. ABC was also used in

relation to costing returns to publishers. Whilst this information was also useful the CFO reflects that the way the information was communicated made the manager much less receptive to it. AC5 “X used formal tones, and the ABC label to explain to the manager what they were doing. You could see the managers eyes glaze over. If the information had been presented in a different way it may have more fully engaged the manager.” “labels frighten people and some see finance as a dark art!!”

On reflection of what the organisation did in terms of use of management accounting data the CFO stated “in the conducting of this interview I can see that we do more contemporary things than I thought!”

The CFO was asked for their perception of change and suggested that the main barriers were time and resources which were also inhibited by training at a professional level. They went on to say “There are so many [contemporary tools] it’s difficult to know what to use.” They reflected that those accountants who are newly qualified may not come forward to offer new ideas even though an organisation has an open minded approach to new innovation. The CFO’s perception is that accountants tend to have certain characteristics which mean they compartmentalise and are as a result likely to be less intuitive – “if it’s working it is OK, the status quo is easier”

They also suggested that the time and resources to implement new ideas mean there is often a feeling of “not wanting to upset the apple-cart”

In connection with the education gap the CFO reflected that as an employer they are not actively involved in training. AC5 “Syllabi change so regularly it’s difficult to know what’s going on and being taught”

The CFO emphasised the importance of CPD activity and expressed the view that technical knowledge is well dealt with but there is very little industry specific CPD. AC5 “case studies are useful, people need good examples, people don’t want to be the first to try something new, they don’t want to be different”

They concluded that “yes there is a gap but not the lack of a will to try something new”. They also expressed that better ways of conducting CPD would help such as short pod casts which could be listened to easily as these

would again save time and resources which the busy accountant in an economically constrained organisation cannot afford to use to attend training courses.

7.7 Analysis of Cases

In order to analyse the cases Stones (2005) quadritpartite framework is used, this framework was discussed in Chapter 4 section 4.10.4. The framework will allow the sensitising of the data from the case studies to better understand how each of the agents in focus within the 5 case studies interprets the use and adoption of traditional and contemporary accounting practices within their organisations.

Using the framework it will be possible to evaluate the agent's context by examining their perception of the external structures, that consist of rules and resources that enable or constrain the production and reproduction of communication, domination, legitimation in the process of considering adoption/adaption of management accounting tools. The external structures themselves can be analysed into those which are general (ontology in general) and might be expected to influence a variety of organisations and those which are organisationally specific (in-situ).

The framework will also allow the examining of the agents conduct and the ways their internal structures i.e. dispositions and conjunctually specific knowledge become the medium of such conduct (in terms of their perception of internal structures). These are further broken down in terms analysing the general dispositions of the accountants in terms of their relationships and interaction with others in the organisation to use tools of management accounting and their conjunctually specific internal structures in relation to their perception of their specific role as an accountant within the organisation.

From this evaluation it will be possible to identify the actions (position–practices) that the accountants take and the outcomes of these actions in terms of whether there is change and diffusion of tools or resistance and reproduction of existing systems.

In order to make sense of the data and conduct the analysis it was necessary to code each of the interviews from the case studies into themes which related to the key areas of Stones quadripartite model. The outcome of this can be seen in Appendix 6.

7.7.1 Evaluation of External Structures

7.7.1.1 Barriers to adoption/adaption of Management Accounting Tools

In the analysis of external structures it is important to be clear where the boundary lies in terms of what is external in relation to the agents. In this case we consider the organisational field as external structures comprising the position-practice relations. The barriers to adopting and adapting management accounting tools and practices have been evaluated on the basis that they relate to the individual organisational context of the agent (in-situ) representing irresistible causal forces (Stones, 2005) that the agent has the capacity to resist but feels unable to do so (Coad and Herbert, 2009) and also their perception of more general barriers which could be appropriate in any organisational setting which Stones (2005) refers to as independent causal influences which are constituted, reproduced or changed independently of the agent in focus.

In terms of those barriers which the agents perceived within their organisational context the main factor which was commented on was in relation to the nature of the business. In CC1 the accountant was very aware that the car manufacturer (Volkswagen Group, VG) had a significant influence over their actions as an accountant and the actions of other actors within the organisation. This barrier was given as the main explanation for the perceived lack of change and inertia in the organisation, MA1 “the way of working was controlled and dictated by VG” In particular they perceived that if they wanted to introduce any new processes or practices they would have to run them alongside the systems that were imposed by VG, MA1 “There seems little point in veering away from the systems they have in place, running two systems would not be cost

effective". It is clear that the agent perceives VG to have a dominant position and therefore they feel that they (the agent) have a lack of power to make changes to the rules and routines of management accounting. VG clearly have the authoritative resources to influence the decision making even if they do not have direct control over the material resources.

A similar situation can be observed in CC3 where the requirements of the US based parent company are seen as a barrier to the agent in terms of their ability to change rules and routines over time. Again it is evident that the perceived power of the parent company resulted in a lack of action on the part of the agent and of other agents in the organisation AC3 "A great deal of the strategy and information in relation to budgets and pricing was devolved down from the parent company". In this instance the parent company controlled not only the authoritative resources but also the material resources to a certain extent which served as a barrier to the agent. AC3 "the parent company dictated everything …….[we]…. were not encouraged to be innovative". In this particular organisation there were additional boundaries perceived by the agent in respect to the underlying structure not of the group but of the individual subsidiary. The company was organised in a matrix structure which was well suited to the nature of the service which was being provided but which resulted in AC3 "a miss match of information". In the perception of the agent there was a conflict between accountants working on business lines and those working on legal entity/country lines which resulted in poor communication of financial information between the two groups. AC3 "any changes made by accountants on business lines with respect to customer discounts for example have a direct effect on our ability to report entity revenue" They go on to add generally about the structure "the [organisation] structure even in this one subsidiary makes it difficult to communicate with others or to know who might have the answer you are looking for".

CC2 is a small organisation without the potential barriers experienced by CC1 and CC3 however the shallow hierarchy of this organisation is also perceived to be a barrier by the accountant. In particular, in relation to the power held by the managing director, in terms of management of time - AC2 "the time available is only sufficient to undertake routine tasks" and also it terms of activity AC2 "The

strategic direction of the business has tended to be short term focused dominated by the MD with an emphasis on who the customer is and what the customer wants. I provide key data on costs and prices in order to steer strategy however it has not been a priority to utilise management accounting information at a strategic level because it would be a long-term term investment".

In CC5 the way the organisation is structured is also given as a reason for a lack of change in routines. The organisation is decentralised with accounting functions being undertaken by shop managers as such, AC5 "we don't feel we can ask them to do anything more complex" A signification structure is in place in terms of the finance system used to budget and communicate with the shop managers and it was felt that any changes to the finance system would result in a breakdown of communication. There was also an element of legitimisation and a moral code which constrained the accountant in terms of changing systems which rested on the trust built up between the accountants and the shop managers over time. AC5 "They [shop managers] understand the system now and we have their trust. To change the systems may break that trust".

A second major factor that appeared as a common barrier to changing practices was access to material resources. Both the accountants in CC1 and CC5 specifically commented on the amount of retraining of staff necessary as a result of any changes to practice. MA1 "yes when I look back I could have made changes but you have to think of the bigger picture just a small change to the budgeting process would have resulted in the retraining of over 100 people". AC5 alludes to the fact that retraining has a detrimental effect on the fact that the organisation is customer facing. The characteristic of being customer facing is particularly important to service organisations and hence contributes in terms of being a barrier. AC5 "If I have to retrain the shop managers because I decide to change the budgeting system besides the resource implications of retraining, I am taking them off the shop floor and that does not help with a customer facing business".

Time is cited by all the accountants as a barrier to change both in terms to additional time needed to undertake or develop new practices alongside their

normal duties and also as a barrier to seeking additional training themselves to add to their knowledge about potential new tools. This was particularly evident in the CC2 which was the smallest company (employing less than 50 people) where the accountant cited time as a factor on five occasions during the interview in relation to things they may like to introduce in the organisation. AC3 also cited the time of their manager as being inhibitive to developing new ideas or making changes "My manager was working 60 hours a week, he tried to listen but he was brow beaten."

In terms of general barriers several factors were cited. The first being general economic conditions. The UK and world economies have been in recession and growth out of recession has been slow. MA1 comments "Current economic conditions force you to stick to current practices and use the same software and tools" AC5 "in the current economic climate you do not want to be the first to try something new". The accountants also cite the economic climate as a reason for not engaging in additional training. AC5 "I can't justify the cost of going on a CPD course even for one day especially if it will not yield any value" MA1 "current economic conditions make it difficult to justify the time and money to go on any new training courses".

Education and a gap between professional education including CPD and practice is cited by all of the accountants as a general barrier in terms of both the CIMA and ACA qualifications obtained by the accountants. MA1 "on the CIMA qualification tools were taught but I have not found I am able to put them into practice. MA4 "I have made limited use of my qualification it's all linked to the organisation". AC5 "the syllabi change so regularly [on professional programmes] it's difficult to know what's going on". AC3 "when you start out straight from practice yes you are trained but you learn the job from your manager". There is evidence from the accountants that they perceive a barrier in terms of how the education they received and the availability of CPD and training relates to service settings. MA1 "qualifications are linked to manufacturing settings" MA1 "the main CPD events are technical and are not appropriate" MA4 "I could not see how the CIMA syllabus linked to the leisure industry" AC5 "CPD needs to be linked to industries". There is also evidence that the accountants perceive a problem with the terminology used and the

number of contemporary tools available. AC2 comments “terminology is a problem, we may do something but not because we actively choose to use a new tool”, they also go on to comment “I actively research and read journals and magazines but I was not familiar with all of the tools in the questionnaire”, and AC5 comments “there are so many [contemporary tools] it’s difficult to know what to use”.

In larger organisations there are also barriers in terms of regulations this was clear in CC3 where the overhead allocation system had to be designed in a way to enable transparency for tax authorities in terms of the amount each legal entity paid for the rent of trunk lines within the transfer pricing system. AC3 “There was a very statutory approach”. In CC5 there was also perceived to be a barrier due to the relationship the organisation has with certain suppliers and customers meaning that their pricing strategy was dictated by that relationship. AC5 “we are often squeezed in the middle”.

7.7.1.2 Enablers of adoption/adaption of Management Accounting Tools

In CC1, 2, 3 and 5 it was possible to observe that the organisation structure for a number of reasons proved to be a barrier to adoption/adaption of management accounting tools. In CC4 it was a change in the organisation structure which enabled the accountant to perceive that change was possible and the change of structure created better communication channels and more responsibility which allowed new KPI’s to be used and also which allowed the regional teams more control over decisions relating to sales channels and therefore resulted in changes to the way management accounting information was used. MA4 “we now have a better ability to interact with each other”. Changes in responsibility also enabled change in CC1 MA1 “Introducing the monthly management meetings enabled us to influence operational plans”. In the case of CC3 the ability to use cross-functional teams was an enabler in allowing the introduction of new ideas such as ABM, benchmarking and environmental costing. AC3 “the use of cross-organisational teams allowed better communication and enhanced the ability to use new ideas”.

In all of CC's 2, 4 and 5 there was clear evidence that the introduction of new financial software enabled changes to take place in terms of management accounting practices used. The use of technology in particular can overcome the problem of time as a scarce resource. AC2 "the new financial software allowed for easier and quicker ways to interrogate the system for data", MA4 "The use of the new computer system opened up the range of data available for reporting" AC5 "the new finance system has enabled us to react quicker and use a greater variety of information".

It was also clear that in CC2 in particular problems encountered in the business were also big enablers for changes to systems and tools used. It was customer complaints that allowed for the introduction of the financial software and poor ratings from a distribution channel that improved the use of KPI's within the business. AC2 "problems actually allowed changes to be made, and new systems and performance measures put in place". A problem encountered in CC3 also resulted in a new management accounting practice being put in place in the form of cash budgeting.

The accountant in CC3 was also very clear that they perceived the personality of managers in an organisation could be both barriers and enablers of change. AC3 "If my manager sent me on a course I knew it was important enough to change what we were doing" "if a manager has an open outlook it is the key to introducing new ideas" AC2 made a similar comment "I could only evoke change when there was an open mindedness on the part of others" and AC5 also suggested "people may be nervous about what they say to senior executives about new ideas". In CC4 MA4 suggested "changes in personnel bring new approaches and ideas" in recounting that a new chief financial officer from a manufacturing background rationalised the performance reporting system in their organisation.

In terms of general enablers all the accountants considered that CPD would be an enabler of change, in particular CPD which was tailored to the industry and which used case studies was suggested by MA1, AC2, MA4 and AC5. MA4 "case studies based on service organisations would be an excellent CPD idea" AC5 "case studies are useful, people need good examples".

The accountants in CC4 and CC5 in particular reflected on the economic environment as being an enabler of change rather than a barrier as was mentioned in section 7.6.1.1 above. In CC4 the economic conditions forced then to look for additional sources of income and as such changed the role and information provided by the regional management accountants in order to adapt. MA4 "whilst changes have not been dynamic ….. we have adapted to the changing leisure market" and in CC5 "the need to compete with large internet providers" spurred the need to source and access wider management accounting information.

7.7.2 Evaluation of Internal Structures

7.7.2.1 General Dispositions

The actions that the actors in focus engage in are also constrained and enabled by the way they interact with other actors in the organisation. In this respect the tools of management accounting which are used on a regular basis are the means for communicating with others in the organisation and interacting in the organisation.

As the traditional tools such as budgeting and variance analysis have been in place sometime these become established as general dispositions in the perception of the accountant actors in focus. MA1 confirms that in their organisation "all tools are very traditional and routine". Routine is used by the other actors to describe their conduct AC2 "traditional tools pervade" and "traditional tools are bread and butter", AC3 "you use the traditional tools, budgets variances and traditional performance measures", MA4 "everyone takes an interest in the budgets and financial data", AC5 "the tools used for operational purposes are very traditional and routine". In all the organisations these tools have become part of the general dispositions and equate to the rules and routines expected within the organisations in relation to the perceived nature of accounting systems and what they are to achieve. Tillmann and Goddard, (2008) in their study of the use of SMA tools found similar

characteristics which suggest a general habitus for accounting including the structure that accounting systems bring, AC5 identifies the consistent way that data is provided to the shop managers. Bridging is also important along with compromise and balance which can be seen from the requirements to compare budget and actual figures and provide explanations. The accounting systems provide a common language with which accountants can communicate with others and the other agents can communicate with each other, AC5 “shop managers understand the system now”. Once these systems are in place a combination of the internal habitus and external structures hold them in place over time.

All of the accountants expressed that when they joined the organisations they learned what they needed to do from others already there, this was in the context that as service organisations they may have had different systems and routines to other organisations but this is likely extendable to any accountant joining any organisations and is a general habitus. AC2 “when you get into an organisation you learn from the people around you” AC2 also adds “you rely on the expertise of others to tell you how the system works and what to do”, AC3 “you learn what to do in your tasks from your manager”. This is consistent with the view of Burns and Scapens, (2000) who also show how the routines of actors become embedded in organisations and so the internal conduct shapes the context within which the agent works and acts. AC3 gives an illustration of how a new routine which they enacted was still being undertaken the same way 10 years later on their return to the organisation. In this respect the ghosts of past actors also play their part in creating the general internal structures which mould the management accounting practices which are used.

The norms that the accountants relate to, also shape their general dispositions and their use of management accounting practices. In particular the agents interviewed expressed their consideration of the effect their actions have on others particularly in terms of changing practices. MA1 “you consider the effect your actions have on others. You don’t want to rock the boat”, AC2 and AC5 both expressed a similar view of “not wanting to upset the apple cart” AC5 also mentioned trust as a key element in understanding why systems were replicated over time “they [the shop managers] understand it now [the budgeting

system] and we have their trust. To change the systems may break that trust" and MC1 commented that they "did not want to confuse dealership teams".

The accountants also expressed the importance of communication and the ability to communicate in the right ways as being instrumental in achieving acceptable outcomes from actions. In particular AC2 comments on the need for "good communication flow to enact change" AC3 recounts how newer accounting staff have different attitudes to communication " X sits 200 yards from me but will send me a personal message on the computer asking a question, the answer to which may well be a yes or no, but by not getting up and communicating [verbally] with others in the department and in other departments there is no real understanding of why the answer might have been yes" they go on to add that "when you communicate how you can help with a problem people are more receptive to what you want to do and you can make a change" AC5 is also clear that the ability to communicate in the right way can influence the ability to make changes. They recount two instances where ABC has been used in the organisation generating different results. In the first instance they reported the cost to the shop every time a cheque was used in a non-technical way and as a result shop managers actively attempted to reduce the number of cheques. However another accountant in the organisation, used technical language and financial terms to give a manager similar information about returns. AC5 "You could see the managers eyes glaze over. If the information had been presented in a different way it may have more fully engaged the manager." They also suggest that the use of accounting labels and financial terms can frighten people.

In this respect the accountants were conscious of their use of the language of accounting and the effect of using accounting terms on the other actors in the organisation. It was also clear that over time the other actors in the organisations had become increasingly familiar with key accounting terms that had filtered into their routines in particular the shop managers in CC5.

The accountant's perception of how they and others see accountants is also an invisible force constraining the way they act. AC5 "some see finance as a dark art!", "newly qualified accountants don't necessarily have the people skills

needed in a customer facing environment", "the types of people who become accountants perhaps tend to compartmentalise and as a result are likely to be less intuitive", AC3 "new accountants are less willing to communicate" are all examples of the perception the accountants have of themselves and this influences the way they interact with others.

A final interesting factor is the way that the accountants perceive change to take place. In the survey respondents were asked whether they agreed with the statements that new management accounting innovations were initiated by management accountants or managers. The results showed that the accountants perceived more strongly that change was initiated from within their departments however in the interviews several comments were made which suggests that in the case study companies they believe that managers control the change process. AC3 "you do what you are told from above", "there is little emphasis to change unless told to do so from above" AC5 "people can be nervous about what they say to senior executives about new ideas", AC2 "strategy and change are controlled by the MD". It is interesting that these comments came from the very largest and smallest organisations and may suggest perceptions of the "way things work" in organisations of a particular size.

7.7.2.2 Conjunctually Specific Knowledge

Conjunctually specific knowledge related to the way in which the accountants as the actors in focus perceive their specific role in the organisation and their expertise as accountants. It is difficult to draw a boundary between what is classed as general dispositions and what is role specific conduct particularly in this case when we were evaluating just the views of the accountants and not of other actors in the organisations.

The main element that all the actors considered important about their role was their level of professional education. In particular there was a perception that their training as professional accountants had not had a big impact on the way they conducted their role in the organisation and this has also enabled an

external structure to be put in place by the accountants in terms of their perceived ability to use their professional education in practice and whether their professional education was fit for purpose in a service setting. The accountants are clear that they are mainly drawing on their knowledge of traditional systems and relying on the actions of those who have gone before rather than relying on skills they have brought from their training into the actions they undertake. MA1 perceived that there had been “little change in my role as a management accountant”, AC2 “traditional tools are bread and butter you have to work up to the fancier ones”, MA4 “I have made limited use of my qualification”.

There was expression on the part of the accountants of the importance of CPD in their roles and that they felt keeping up to date with new techniques was important. AC2 “I actively research and read journals” AC5 “I keep up to date with the professional magazine and the website and go on courses but there are so many [contemporary tools] out there it is difficult to know what to use. They go on to add “Things are always on the to-do list but never really come to fruition.”

The accountants whilst relying on their specific knowledge felt constrained by the fact that CPD events were not appropriate for their industry setting and were also aware of the resource implications of extending their education though CPD and training. MA1 “there has got to be good value for money or it cannot be justified”, AC3 “if my manager found the resource to send us on training we knew it was important enough to change what we were doing.” AC5 “it is hard to justify the time and money to go on CPD courses” but also recognises “training courses foster ideas”. AC5 and MA4 also both suggest that they have found industry specific forums and conferences more beneficial than those put on by their professional bodies.

This suggests that whilst the accountants perceive their role to be one where they must keep abreast of new tools and techniques they are aware of the external and internal structures which inhibit their ability to engage with them, including the lack of perceived appropriate CPD events, access to resources and power to enact as was the case with AC2 who despite keeping up to date

with new tools and techniques did not have the power or resources in the organisation to use them.

MA1 also perceived that it would be their ability to show a financial return from a new idea which would be well received by those in a power position in the organisation "You would have to show that there is a significant financial outcome to make a change". They also expressed an opinion about their perception of the accountant in the organisation and how that may influence their role MA1 "you need to be on the senior management team to influence strategic planning"

AC5 expressed an opinion on others in the accounting team and that those currently undertaking qualifications don't seem to want to offer new ideas. "X is keen to progress and ambitious but is reluctant to bring contemporary ideas to my attention". AC5 and AC3 both expressed the opinion that accountants had a willingness to learn but other factors such as balance of power and access to resources hinder this ability.

AC5 sums up her perception of her role and the role of management accounting "You need to have as many of those things [management accounting tools] in your toolbox which you can pull out and use – I think that some of the things in my toolbox are dusty!! Been there quite a long time it would not hurt to have a few new things in there too".

7.7.3 Evaluation of Agents Actions

The active agency reveals how the agent has drawn on their internal structures and the enabler's and barriers of their external structures to shape their actions.

In the context of all the organisations this has resulted in the actions to continue the use of traditional tools of management accounting albeit tailored to meet the needs of the service sector organisations they serve. In particular this has manifested itself in the overhead allocation system used in CC3 the ability to adapt to a variety of sales channels in CC2, 4 and 5, and the use of variance analysis without standard costs in all of the organisations.

The evaluation of what and why they used tools, clearly suggested elements of habitus and of constraint by barriers both real and virtual in their organisational context. MA1 “there is no impetus for change, management accounting comes back to budgets and forecasts”. AC2 “the business has to be run on the basis of cash” MA4 “in respect to traditional tools it is very much routine reporting.” AC5 “Sticking to the traditional approach works for us even if we trial something we tend to revert back to the traditional”

Each of the organisations experienced the ability to introduce new tools and ideas despite the perceived barriers in place. The main element which brought the ability to change in CC2 and CC5 was the introduction of new financial software. The accountants’ ability to use their knowledge of the tools available and how they could be interwoven with the technology allowed the actors to engage in new activities breaking down the barriers of resource which had previously restricted their actions. For CC2 that included the ability to undertake CRM and CPA activities and enhance benchmarking and performance measurement tools. For CC5 it gave to opportunity again to engage with CPA and become more actively involved in strategic decision making, the changes made directly affected the HO use of accounting information and did not affect any of the barriers in place with regards to the decentralised structure of the organisation this is supported by the views of Gartner and Krichbaum in their 2014 work who found the use of ERP was changing the role of the management accountant by integrating them with more strategic projects and aiding their communication around the organisation. The agent in CC5 also found ways of communicating with other actors which encouraged them to engage with some of the actions being undertaken in terms of ABC. The ability to use the new software also enhanced the ability to use their knowledge to reduce the length of management reports AC5 “the CFO report is now only 10 pages long before [the ability to use the new software] it would have been over 30”.

In CC4 the change in organisational structure provided the impetus for the accountants to undertake different actions with respect to reporting and responsibility. The change in structure gave then more power to make changes to their regions and the market conditions also gave them the impetus to look

for new sales channels and therefore provide the information needed to make these decisions which had been lacking in the organisation before. This is also evident in CC1 where the changes made came from the ability to devolve responsibility to the dealership teams and empowered the teams to set their own targets over and above the requirements of VG. In CC1 the accountant perceived the action as “bigger input into performance management”.

In CC3 the largest organisation there was also evidence of action which resulted though good communication and the ability to put accountants in intercompany groups to evaluate situations.

As a result the practices of the accountants have evolved over time to encompass both traditional and some contemporary tools of management accounting.

7.7.4 Evaluation of Outcomes

The outcomes reflect in each case whether there is change and diffusion of tools or resistance and reproduction of existing systems.

In respect of each of the organisations they have not removed the established practices which have become routine over time and in that respect there is not resistance but inertia with respect to the practices used and additionally the external structures which hold those practices in place become stronger over time hence the resulting internal structures which suggest “we always do things this way” as normal practice. It is clear to see that it would be difficult on the part of the actors in focus to be able to change these routine practices in any way but via minor modifications to the routines and offers a reason why they become embedded in many organisations as could be seen from the review of the literature in chapter 2 section 2.6. Additionally CC1 and CC3 have organisation structures where there is great influence from external actors and the way in which management accounting is used may be viewed as being based on rules which are enforced from the external organisations. Burns and Scapens (2000) suggest that rules as more formalised records of what should be done are likely to be reviewed at discrete intervals and therefore there is less

ability to achieve even incremental change of the routines that the rules are based on.

In all of the organisations there is change and diffusion of practices which have occurred over time. AC5 summarises "[In the conducting of this interview] I can see that we do more contemporary things than I thought" they add "its baby steps really", MA4 reflects on change in their organisation "whilst changes have not been dynamic and we cannot say we have widely introduced new tools we have adapted to the changing leisure market with what we have done." In respect to the perception of these accountants, the change has been introduced gradually over time, and as a result, has changed some of the in-situ barriers, which were perceived by the actors. This change is often referred to as evolutionary (Burns and Scapens, 2000) and added new routines to the ones which were already there.

The change experienced by the accountant in CC2 might have been described as more revolutionary in terms that it was felt to have been in response to "firefighting problems" some of these could have been said to have changed the existing routines such as their warehousing system and their use of KPI's and other change followed more evolutionarily and added to existing routines when the financial system was used more fully.

Change may also be evaluated in terms of a typology Sulaiman and Mitchell (2005) examined management accounting change in the context of whether the change involves the use of a new technique as an addition, or replacement or whether it is a modification of an existing technique in terms of the output or operational use. They also included change in terms of eliminating an existing practice without replacing it. They could find no evidence of organisations choosing just to eliminate existing techniques which is consistent with the survey results in this study. In the context of the five cases it can be observed that in all cases the changes were in addition to existing practices or in some cases extensions to existing practice for example the change in terms of using more visual information in performance reports in CC4 would be classed as output modification. They found that any introduction of new techniques was likely to be problematic and therefore less likely to happen and modification of

existing tools is likely to predominate also supporting the case for replication of existing tools over time. Chanegrih (2008) also concurred that management accounting change was more evolutionary than revolutionary in their work which also followed up and confirmed Sulaiman and Mitchell's typology.

Johansson and Siverbo (2009) further extend the idea of evolutionary change by suggesting that it should be expanded to consider both continuity and change as evolutionary outcomes.

7.8 Chapter Summary

The aim of this chapter was to use the case studies to evaluate the use of traditional and contemporary tools of management accounting in a service sector context. In particular to examine the extent to which management accounting practices become embedded in service organisations and to understand the reasons for change or lack of change in the tools used in service organisations.

A review has been made of each of the five cases detailing the tools that they use and the accountants' perception of how and why they are used paying attention to any differences in the way the tools are used in a service context.

In the past evaluation of how management accounting practices become established have been conducted in two ways. Either by using the economic model, which suggests that new tools will only be introduced if they are in the economic interests of the organisation, or from an institutional perspective, which suggests that organisations in the same economic environment will adopt similar practices through a mimetic process (Coad et al, 2015). It is possible to see from the case studies that both the resource implications and the mimetic elements are present in the discussions with the accountants.

In this study however a strong structuration theory approach has been applied to the problem in order to give greater depth to the issue and to explain the forces at work to shape the actions of the accountants in respect to replicating the same practices over time or changing to new ones.

The evaluation of the cases clearly shows a number of external structures in place which have shaped the agents ability to act both in terms of those which the actors perceive as barriers and enablers to their ability to replicate or change. The evaluation has also considered the conduct of the actors in terms of internal structures which are in place again enabling or constraining the action of the accountants.

In each of the case companies it is possible to see the underlying reasons why traditional management accounting practices pervade and continue to be used and equally it is also clear to see that change has occurred in all of the organisations through the actions of the agents resulting in changing external and internal structures which will also allow the new tools to become embedded in the organisations.

Chapter 8: Discussion and Conclusions

8.1 Introduction

Chapter one gave an overview of the current state of management accounting practices in both international and UK based organisations. Following the calls of Johnson and Kaplan (1987) and the dynamic changes in the business environment, changes began to take place in terms of adding new and contemporary tools of management accounting to these traditional tools already being utilised in practice. The chapter highlighted that much of the change in the use of management accounting tools used and practices undertaken have been recorded in respect to their effect on manufacturing organisations. Little work has been undertaken with respect to service organisations despite their significant contribution to the UK and global economies. The research problem was defined showing how the service sector of the UK has been overlooked in terms of management accounting research. Lowry (1990) was one of the first academics to highlight the disparity between the economic significance of the service sector and the amount of management accounting research being undertaken in the sector. The research aim was developed to provide a deeper understanding of management accounting practice in the context of service industries, by exploring a number of traditional and contemporary management accounting tools and their relationship to service industries. Chapter two provided a detailed review of the traditional and contemporary tools which have evolved over time and considered the varied empirical evidence of their use in practice together with a review of the literature relating to management accounting change and the debate of the theory practice gap in management accounting. Chapter three provided further insight into the role and importance of the UK service sector and its key characteristics in order to frame the research being undertaken. Chapter four considered the methodology to be followed and the social theory frameworks which could be applied to a study such as this one and a research paradigm, design and a framework were agreed for the progression of the empirical work. In chapter five the method to be used to conduct the research was considered and full details were given of both the survey and the case study methods to be used. Chapter six contains

the findings and analysis resulting from the broad based survey work and chapter seven the findings and analysis of the case studies using a strong structuration framework.

This conclusion chapter will draw together the results from chapters six and seven against the frame of the literature review and the relevant theories. Research questions 1-4 were developed in order to explore first the wider context and then the more detailed context of the development of management accounting practices in service organisations in the UK. After each research question has been discussed an overall summary and reflection on the contribution to theory and practice will be provided. The chapter ends with a consideration of the limitations of the thesis and the potential for further work in the field.

8.2 Discussion and Analysis by research question

In this section each research question is addressed drawing on the survey and case study analysis together with the relevant literature and theoretical frames. Where issues are related to more than one research questions they will be addressed in relation to the most pertinent.

8.2.1 RQ1 – Application of traditional and contemporary tools in service organisations.

Following on from the review of the empirical literature in chapter two a gap in the literature was found in respect of service organisations there was no evidence of a comprehensive investigation of what practices were being used in service organisations to that end RQ1 asked: **- To what extent are traditional and contemporary management accounting tools being applied within service sector organisations?**

The results of the survey represent the views of a variety of different types of service organisation, together with a variety of different sizes of service organisation. The respondents all had a management accounting function in

their organisations. The survey was specifically designed to test the degree of use of tools across a range of organisational activities including costing, pricing, budgeting etc. It was clear from the results of the survey that the respondents used management accounting tools to support a wide range of activities across their organisations and that for each activity they would use more than one tool on a regular basis with at least two other tools being used occasionally on average.

There was a clear indication that the largest organisations used the most tools in each category of organisational activity. It was interesting to note that on average micro and small companies used more tools than those who were of a medium size. It was not possible to gain much further insight into why this might be by evaluating this factor in relation to the two case study companies which were small and medium. The small company experienced a number of problems which forced it to seek out new tools or techniques in order to alleviate the problems, a factor which was not evident in the medium organisation though a change in organisational structure in the medium organisation was required to prompt the organisation to use more tools and techniques. This may suggest that having overcome the problems associated with the running of a small organisation the medium sized organisations tend to sit back in a position of established practice.

When the organisations are considered in respect to the type of service they provide there is little link between sector and what is used though table 6.20 demonstrates that both the tourism and transport services made more use of different budgeting tools and tourism companies made the most use of costing tools. Links could be seen to specific research which had been conducted by Pavlatos and Paggios (2009), Mia and Patiar (2001) and Longton (2003).

In terms of what is being used the findings showed that the most popular tools were the ones which were considered traditional in terms of the categories. Table 6.18 is particularly useful in showing the relative popularity of traditional and contemporary tools. 73% of the traditional tools were in the top 50% of tools used whilst only 28% of contemporary tools were in the top 50%. When the most popular tools were considered table 6.5 shows 8 out of the top ten

were traditional and in terms of the least popular tools 8 out of the top ten would be considered contemporary tools. The data confirms that service organisations focus their attention on those tools which are traditional and are slow to adopt the more contemporary tools.

The results of the survey were further supported by the case studies where all the companies clearly expressed their use of traditional budgeting, costing and performance measurement tools, the literature relating to these tools also shows (albeit manufacturing sector based) evidence of the continued use of these tools over time and across different country settings (e.g. Libby and Lindsey, 2010; Abdel-Kader and Luther, 2008). The cases also supported the move in the survey results for businesses to use specific contemporary tools with evidence of all cases moving to use tools such as benchmarking, CPA and CRM in particular. This is again consistent with the literature evaluating these techniques and finding greater use of them in practice (e.g. Francis and Holloway, 2007; Dalci et al, 2009).

The degree to whether the adoption or lack of adoption relates to a theory practice gap can be alluded to by considering that the results of the survey showed that the degree of unfamiliarity with contemporary tools of respondents was significantly higher than that of traditional tools, 80% of the tools respondents were most unfamiliar with were contemporary in nature and additionally that those tools came from two organisational activity areas namely those to aid performance management and those to aid strategy.

The lack of unfamiliarity with these tools clearly suggests that there continues to be a gap between education and practice. The tools included in the list of those the respondents were unfamiliar with are clearly on the syllabi of both professional accounting bodies and UK university undergraduate and postgraduate course in accounting. The survey work supports the review of the theory practice gap contained in the literature review and in particular the findings of Tan (2004). Additional insight can be drawn from the analysis of the case studies and will be discussed in more detail in relation to RQ4.

8.2.2 RQ2 – Comparison with manufacturing organisations

Since service organisations have unique characteristics which set them apart from other organisations it was felt that considering the degree to which the results of this survey showed any difference to previous surveys which considered mainly manufacturing organisations would perhaps shed additional light on the service industry context. To that end the second research question **- Do the management accounting tools used in service sector organisations match the tools as applied in manufacturing organisations?** was evaluated.

The literature review considered the evidence from over 50 separate studies reporting on the adoption of traditional and contemporary tools of management accounting. The survey was compared predominately to the results of the Ross and Kovachev 2009 survey as this was the closest survey in terms of design, structure and audience.

On evaluation there was found to be distinct similarity between the results in the area of the number of tools used within each organisational activity grouping suggesting that regardless of sector organisations will choose to use a similar number of tools and also that the actual tools chosen would tend to be the same. The two surveys contained four of the same most popular tools by the amount of usage. These tools were profit margins, cash forecasting, variance analysis and strategic planning. Within the different categories of tools for different organisational activity there were also very similar usage rates for the most popular tools and the least popular tools.

In comparison with a wider range of previous surveys there is further evidence of a consistency of tools used and popularity of the traditional tools. Budgeting, overhead allocation and variance analysis were all very popular with the respondents of many of the empirical pieces of research evaluated (see chapter 6, section 6.12.2 for full details).

In terms of contemporary tools and in some cases specifically SMA tools the main tools being used more widely are benchmarking, CPA and BSC and the main conclusion was that these tools have very low adoption rates when

compared to traditional tools and in spite of respondents citing that they intended to adopt them in future the latest results still show the lag in take up (Yazdifar and Askarany, 2010; Angelakis et al, 2010).

The use of contingency theory when applied to these surveys found some positive relationship between size and sophistication of techniques used and whilst this study could not prove a link between either size of service organisation or type of service organisation and individual tools (consistent with Bogale, 2013), there was evidence to support the claim made by others as to size and numbers of tools used (Innes and Mitchell, 1995; Shields, 1995).

These broad based surveys with similar results over time add weight to the institutional theoretical perspective purported by Di Maggio and Powell, (1991) and also Granlund and Lukka, (1998) which suggest that mimietic isomorphism is a key factor in shaping the tools that organisations use as they will tend to copy each other. This also reflects comments made in the course of the case study interviews of AC5 “not wanting to be the first to try something new” and AC2 “referring to others with similar businesses to find out what they are doing”. However this approach does not give enough depth to understand why, which resulted in this thesis taking a strong structuration framework to evaluate the actions of the accountants.

8.2.3 RQ3 – embeddedness of management accounting tools in service organisations

It was necessary to get a more detailed view of the state of management accounting practices in service organisations as well as understanding what organisations used which could be ascertained from the survey, the questions of why and how needed to be addressed. To that end detailed case studies were undertaken with service organisations of different size and type in order to answer the third research question **– how do management accounting tools become embedded in service sector organisations?**

In the course of conducting the interviews with the accountants it was necessary to reflect on how the tools of management accounting were being

used by the organisations' and the structures that allowed the traditional tools to become embedded. In this respect the interviews were analysed in relation to Stones (2005) quadripartite framework of strong structuration theory. In relation to this particular research question it was necessary to consider the internal structures in particular which appear in order to preserve the traditional methods and which result in inertia and the replication of practice.

In all the organisations there was a strong link to the traditional tools and a strong opinion that these tools should be used. When queried about the way in which they used the tools it was possible to see that there are deviations from the way in which tools are used in other industries. In particular overhead allocation is based very much on individual organisational contexts and also organisational structure in CC5 overhead allocation was straightforward and could be easily linked to shops and products sold in a similar way to which it would be achieved in manufacturing however in CC3 the matrix structure of the organisation resulted in overhead allocation becoming a very difficult task working between customers and countries.

In terms of the pricing tools used, these were closely linked to the market and the competition and were not specifically related to the nature of service organisations. Variance analysis was carried out by comparing budgets and actuals and not by the use of standards as one might expect to see in manufacturing organisations.

The accountants were all clear that they had had to adapt their understanding of management accounting to the nature of the organisation and their conduct in terms of replicating the use of traditional tools over time was guided by the ghosts of past actors and learning from their existing managers as to how the organisation works and in many respects acknowledging "the way things are done around here!"

The norms to which the actors relate to also helped to embed the traditional practices in particular a concern for the effect of any changes on others within the organisation and the level of trust which the existing systems had built which could disappear if new practices were put in place.

The way in which the accountants chose to communicate was another factor which would either act as a barrier or enabler of change, the more open communication without technical language the greater the accountants in the case companies perceived they would be able to add new tools or modify existing ones. They reflected that others in the organisations did not react well to accounting labels and these labels are more often associated with newer tools as they are less likely to have filtered into general terminology in an organisation.

The findings are consistent with the work of Burns and Scapens (2000) who discussed the rules, routines, institutions and actors together in shaping management accounting change. It is clear from the cases that where there have been rules the process of change has been slower as in CC1 and in CC3 (at a local level) and that the behaviour of the actors in the organisation has clearly allowed the accounting practices to become embedded over time through the use of a common language, understanding and stocks of knowledge.

The view of Burns and Scapens (2000) that once activities become routinized they become taken for granted and unquestioned has been corroborated through the literature over time (Pentland, 2011; Quinn, 2014).

Jarvenpaa (2009) conducted a study focusing on two cases and viewed the results from an institutional perspective but found that management accounting practices are embedded in cultural systems which are created and changed by the field actors. Jarvenpaa's cultural systems can be interpreted as equivalent to the internal structures which have been identified under Stones (2005) model and provides further evidence for confirming the invisible conduct barriers and enablers are largely responsible for the long term embeddedness of traditional management accounting practice.

Tillmann and Goddard (2008) whilst using a sense making approach to SMA highlighted the same internal structures or habitus as linking agents' actions to either reproduce existing management accounting practices or allow change to incorporate new ones.

They highlighted making information more coherent and understandable, this was a trait which was evident in all the cases and both served to embed the existing practices as well as allow for the introduction of new ones. They also identified the professional knowledge of the accountant as being an important factor. This was also addressed by the accountants in this study through their understanding of the influence of their conjunctually specific knowledge to the shaping of the systems in use.

8.2.4 RQ4 – Barriers and Enablers of change in service organisations.

Having considered what tools service organisations use, the empirical evidence which suggests that contemporary tool adoption is still low and based on the perception of management accounting change in the literature, it became necessary to address the reasons why there is or isn't change to the use of contemporary tools in service organisations and answer the final research question **- What are the reasons for change/lack of change in management accounting tools used in service sector organisations?**

Through the use of Stones (2005) quadripartite framework it was possible to identify the external structures which the accountants perceived were in place as either barriers or enablers which resulted in them either replicating the existing techniques or changing and using contemporary tools.

The use of other frameworks as were considered in Chapter 4 could suggest as in the case of economic theory that change is purely undertaken on financial grounds, if the new tool can be considered to yield a monetary benefit then it would be undertaken. Other frameworks look at institutional theory and highlight a number of external factors which may have an influence on internal rules and routines. The use of the quadripartite model allows for the consideration of both economic and social reasons and results in an in depth study which considers external factors which are general and over which any actor could not have control and also those which are perceived in relation to the actors own organisational environment (in-situ) over which they may have

control but choose not to act on, and therefore add an extra dimension to the reasons for change or lack of change.

In respect of the results of the analysis it was possible to see that the interviewees agreed on the general barriers they faced and these materialised in the form of education and CPD. There was a clear indication that the accountants felt there was a gap between what they and others were being taught and what they needed to be able to do in practice. They also suggested that there was a gap between the CPD courses that they were able to go on and the contemporary tools that they might use both in terms of technical content of courses and also the pedagogic approach with which the courses were conducted. The accountants were clear that they would like to see case studies related to service organisations where it would be much clearer how a tool could be used and fit within the organisation as well as the benefits – financial or otherwise from its use. In other words they want other practitioners to tell them how they overcame their barriers in order to change their own practice.

The economic environment was also considered and was felt to act as a barrier or as an enabler. In respect of barriers it was an external source of resource restriction emanating in not being able to take on more staff or have sufficient time to enact change in respect of an enabler it resulted in the accountants being forced to consider how they might change accounting practices or use information differently in order to gain a competitive advantage where the market was becoming more crowded.

Finally regulation is cited as barrier in CC3 due to the multinational nature of the organisation it has to be mindful of country specific financial accounting and tax regulations.

These general external barriers and enablers could be considered similar in nature to those of Granlund and Lukkas (1998) model which considers economic pressures, coercive pressures (regulatory), normative pressures (education) and mimetic pressures (conforming to be like others). Their model however does not take into account in-situ factors which affect the actions of the accountants (actors in focus). A number of academics have conducted studies

relating to the external barriers and have highlighted the competitive environment and technology as the main areas (Haldma and Laats, 2002; Libby and Waterhouse, 1996; Akbar 2010).

In terms of those barriers which the agents perceived in their organisational setting the main barrier was felt to be the nature of the organisation. CC1 was franchised to a car manufacturer, CC3 was a subsidiary of a large overseas parent, CC5 has a decentralised structure and CC2 is a very small organisation with a shallow hierarchy. CC4 whilst also having a decentralised structure did not perceive this as a barrier possibly because there were management accountants lower in the hierarchy whereas in CC5 they were centralised.

Access to material resources was also seen as a major barrier, in terms of time available, retraining and also in terms of availability and skill level of additional accountants.

In terms of elements which could be considered enablers and barriers the introduction of new technology through the appropriate financial software was a significant enabler in three of the organisations and can clearly be seen as an additional aid to removing the material barriers of time, retraining and human resources cited as barriers above.

Personality of management was also cited as a major factor in the ability to drive change. There is a link here to the perception of where the impetus for change occurs as suggested by Burns and Viavio (2001) and also forms a link to the perception of the accountants in the survey conducted in this study where there was an over whelming agreement that management accounting innovations occur through local rather than management interventions.

The external factors above can be seen to be consistent with the work of Adler et al (2000) and the factors cited by the accountants they surveyed from 158 manufacturing organisations in New Zealand highlighting that there may be little difference either from country to country or organisational sector when it comes to barriers for management accounting change. In particular the access to material resources were the most cited reasons amongst their respondents, followed by management inertia and the fact that current systems are adequate.

Chenhall and Euske (2007) also highlight organisational structure as a key barrier in their research. A number of academics have discovered similar patterns in terms of barriers and factors that influence management accounting change in terms of external and internal factors including Thomas (1989), Burns et al (1999), Burns and Viavio (2001), Kasurinen (2002) Sulaiman et al (2008) and Akbar (2010).

In relation to other studies of management accounting change in a service sector context the main source of work has been in relation to financial services. Cobb et al's 1995 study of management accounting change in a bank contains many of the barriers and enablers which can be seen to be present in the case study companies including changes of high level financial staff and market conditions. Whilst at that time they did not have access to Stones (2005) model their work contains many links between the human actors and the structures in place. Nielsen et al (2000) identified barriers to the implementation of customer-orientated management accounting in Danish financial services companies in particular identifying a lack of top level support high amongst the barriers.

8.3 Contribution of this research

There has been a growing amount of management accounting research both in terms of topics and theoretical basis. Much of the work conducted could be seen to be based on economic theory and can be seen from the categorisation of mainstream management accounting research. There has been a growing move to the use of social theory particularly the use of institutional theory in management accounting resulting in the development of the interpretive and critical management accounting research. Baldvinsdottir et al (2010) reflect that there has still been a lack of research related to what might benefit practice, and Scapens (2006b) also reflects the need to make "theoretically informed management accounting research more relevant to management accounting practitioners" (2006b:9).

Only limited efforts have been made to study the management accounting practices of service organisations and even in manufacturing organisations

there has been only recent attention in attempting to use theory to evaluate the underlying reasons and process of change.

This thesis has made contributions both to the empirical study of service sector organisations and also to understanding the process of change in management accounting practice in service organisations through theoretical advancement using Stones (2005) quadripartite model and research method advancement in empirical service sector research.

8.3.1 Empirical contributions

In the development of this thesis it was evident that there was a lack of research relating to the use of management accounting tools in service organisations. This work has provided a deeper understanding of management accounting practice in the context of service industries. The use of survey evidence has showed what tools are currently being used in a service sector context. The work clearly shows that there is a reliance on the traditional tools in a service sector context with limited use of the more contemporary tools.

The research also considered if there is anything unique and homogeneous related to service industries collectively, or any industry specific traits that influence management accounting practice. The comparison with other empirical evidence of manufacturing organisations led to the conclusion that the tools and techniques and the levels of adoption are similar to those of manufacturing organisations. In the analysis of the case studies it was evident that the further a service could be seen to be away from manufacturing on a continuum the more likely the tools would be adapted to make a better fit with the organisation.

Through the exploration of the state of management accounting practice in the case study service organisations, it was possible to investigate the reasons for adoption of management accounting practices and the barriers that service organisations face in their adoption and use of management accounting tools. The evidence suggests a wide range of both internal and external structures

influence the embeddedness of methods and the ability to diffuse and change practices over time.

The use of strong structuration theory allowed a detailed evaluation of the external structural barriers and their interaction with the accountants in focus. This served to demonstrate that in a service sector context there is a theory practice gap evident in terms of education which was highlighted as a specific barrier to change.

Specifically highlighting that the accountants found their professional education limited in exposing them to the more contemporary tools and post qualification the CPD events in management accounting were general and often focused on a manufacturing environment, which did not serve their needs in a service organisation. This work therefore provides a contribution to professional accounting education in exposing areas which they may want to consider in adapting their syllabi and CPD provision in the service of their members in contemporary organisations.

The use of the strong structuration theory in identifying the position of the accountants in the organisation also exposed the changing role of the management accountant as they develop their career. The work highlighted that given the changing role there is a need to adapt training and development to reflect the business partner style role which is now becoming evident in organisations and as such this work provides a further contribution to professional accounting educators to consider their ability to support management accountants in their changing role.

The findings from the use of strong structuration theory in analysing the cases also expose wider issues for accounting education in the way both syllabi and pedagogical approaches are developed in response to the changing role of the accountants and the changing needs of contemporary organisations.

8.3.2 Theoretical Contribution

The use of both economic and social theories has failed to address the full picture of management accounting change and in particular the use of institutional theory has addressed external or internal factors of change but has not successfully linked them together.

There has been greater recognition of the interaction between the human actors and the structures in place in terms of shaping their decisions to use particular tools or to evoke change. Macintosh and Scapens (1991) were amongst the first to draw structuration theory into the domain of management accounting research considering the link between actors and structures in management control systems. In terms of understanding management accounting change Giddens original model of structuration was felt to be unsuitable (Archer 1995) due to the fact that the model did not conceptualise time. Stones (2005) quadripartite model can be seen as a vehicle to both overcome the problem of time and also the distinction between general and in-situ structures which influence practice.

Coad et al (2015) reflect that Stones theory provides the ability to "achieve a more meaningful understanding of the role of management accounting practice" (2015:154). They additionally reflect on the potential usefulness of the model in considering how management accounting practices become established and diffuse through organisational fields and conclude that there have not been many papers utilising this approach.

This study utilising the quadripartite framework gives a clear indication of how this theory can be used to frame case studies and to provide a variety of rich data relating to the multiple structures and the actions of the human actors in organisations.

The use of the framework in this thesis has illustrated the extent to which traditional management accounting practices have become embedded in the organisations and the reasons why this has happened. The framework has also served to allow for a greater understanding of both the internal and external structures acting as barriers or enablers of management accounting change

and the conduct of the actors in response to these which has been absent in previous studies. Hence provides insight as to why change is difficult to achieve and new practices are difficult to embed in a service sector context.

Since the use of structuration theory and strong structuration theory in management accounting research has not been extensive and previous work does not focus on the use of the quadripartite model in the context of management accounting change this thesis also provides a contribution in developing and interpreting the model as a vehicle for exploring management accounting change. Future researchers who choose to consider the triggers for change and the recursive nature of structure and agency in organisations would be able to draw on the application of the quadripartite framework as it has been applied in this thesis.

8.3.3 Research method Contribution

Much of the work relating to changes in management accounting practice have utilised cross-sectional surveys which provide information relating to what is used but provide no further contextual evidence as to why or how. The surveys cannot explain the process through which management accounting practices change and can only provide limited insights for practice.

The use of the multiple case study approach over and above the cross-sectional survey allows for a much more detailed study of the actual practices and processes used in the organisations and show how over time actions have changed and new structures have emerged as a result and also how structures have changed and have changed the actions of the accountants in focus. The case studies show how new management accounting practices have become embedded alongside the existing ones and how the conduct of the accountants has influenced the outcomes. The use of the cases gives new insight into how management accounting change can be achieved.

8.4 Limitations of this study

The findings of this study should be considered in the light of the following limitations.

In respect to the survey evidence there are a number of limitations which should be considered. The survey sample whilst representative is small and therefore it is difficult to make generalisations about all service sector organisations in the UK. Additionally the responses are from UK organisations and as such cannot be easily generalised to other countries. The survey investigated the use of a large number (66) management accounting tools but this is not an exhaustive list and other tools could have been used by the respondents though they were asked to comment on any notable exceptions.

In relation to the case studies whilst the cases were chosen to represent organisations of different service type and size the information drawn from these cases is subjective and relates to the participants own observations and interpretations of their environment and therefore again it is not possible to provide generalisations for all organisations in all settings. In relation to the data gathered the researcher made every effort to ensure they remained objective and did not unduly influence the interviewees.

The interviews were conducted with senior accountants in each organisation and in order to get a picture of management accounting change from different perspectives it would have been necessary to interview a larger population of the organisations concerned.

8.5 Areas for future research

There are several research avenues which can stem from this thesis.

In order to pursue further insights into the service sector context a further widespread study of practice could be undertaken or additional work undertaken on a cross country basis to allow the ability to make further generalisations possible.

It is also envisaged that further case study research can be undertaken in a service sector context to study specifically the way individual techniques have become adopted and adapted into organisations both in terms of the traditional tools but also in the case of contemporary tools. This will allow the ability to draw specific case studies which can be used in a service sector context to elaborate on best practice approaches and develop a clearer understanding of how tools can be used.

In relation to new tools, investigations relating to the process of implementation together with the barriers inhibiting change, how they have been overcome and the benefits in terms of outcomes would make very useful CPD resources for management accountants in such a setting.

The development of further studies of management accounting change using a strong structuration approach would also add to the current research by providing further rich evidence of the process of change and the use of management accounting tools.

8.6 Concluding remarks

Since Johnson and Kaplan started the debate in 1987 as to the relevance of management accounting in the modern environment researchers have been attempting to evaluate the state of management accounting practice. Much research has been undertaken which shows that there has been inertia in terms of the use of traditional tools but also that the use of contemporary tools has increased slowly over time. Other academics have sought to understand why change has been slow investigating both the external and internal environment of organisations and amidst this, the discussion as to the extent of a theory practice gap continues to burn.

This research has added to the debate by contributing a view based on service sector organisations which has been missing both from the general research on management accounting practice and also on management accounting change. The research has also added to the potential debate regarding the theory practice gap from a service sector perspective.

List of References

Abdel-Kader, M., & Luther, R. (2006). IFAC's Conception of the Evolution of Management Accounting. *Advances in Management Accounting, 15*, 229-247.

Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review, 40(1)*, 2-27.

Abdel-Maksoud, A., Dugdale, D., & Luther, R. (2005). Non-financial performance measurement in manufacturing companies. *The British Accounting Review, 37(3)*, 261-297.

Abrahamson, E. (1991). Managerial fads and fashions: The diffusion and rejection of innovations. *Academy of management review, 16(3)*, 586-612.

Adamany, H., & Gonsalves, F. (1994). Life cycle management: an integrated approach to managing investments. *Journal of Cost management, 8*, 35-48.

Adler, R., Everett, A., & Waldron, M. (2000). Advanced management accounting techniques in manufacturing: utilization, benefits, and barriers to implementation. *Accounting Forum, 24(2)*, 131-150.

Agbejule, A. (2006). Motivation for activity based costing implementation. Administrative and institutional influences . *Journal of Accounting&Organizational Change, 2(1)*, 7-16.

Ahmed, M., & Scapens, R. (2003). The Evloution of Cost-based Pricing Rules in Britain: an institutional perspective. *Review of political Economy, 15(2)*, 173-191.

Ahrens, T., & Chapman, C. (2002). The structuration of legitimate performance measures and management: day-to-day contests of accountability in a UK restaurant chain. *Management Accounting Research, 13(2)*, 151-171.

Ahrens, T., & Chapman, C. (2007). Management Accounting as Practice,. *Accounting, Organization and Society, 32(1)*, 1-27.

Akbar, S. (2010). Management accouting change: a comparative study of Indian and UK organsiations. *Journal of Global Business Advancement, 3(1)*, 1-27.

Allott, A. (2000). Management Accounitng Change. *Management Accounting* , July/August pp. 54-55.

Al-Omiri, M., & Drury, C. (2007). A survey of factors influencing the choice of product costing systems in UK organizations. *Management Accounting Research, 18(4)*, 399-424.

Angelakis, G., Theriou, N., & Floropoulos, I. (2010). Adoption and benefits of management accounting practices: Evidence from Greece and Finland. *Advances in accounting, 26(1)*, 87-96.

Ansari, S., Bell, J., & Okano, H. (2007). A review of literature of target costing and cost management. In C. Chapman, A. Hopwood, & M. Shields, *Handbook of MA Research, vol. 2* (pp. 507-530). Oxford: Elsevier.

Ansari, S., Fiss, P., & Zajac, E. (2010). Made to fit: How practices vary as they diffuse. *Academy of Management Review, 35(1)*, 67-92.

Anthony, R. (1989). Reminisciences about Management accounting. *Journal of Management accountng Research, 1*, 1-20.

Archer, M. (1995). *Realist Social Theory: The Morphogenetic Approach.* Cambridge: Cambridge University Press.

Ardalan, K. (2003). Theories and controversies in finance: a paradigmatic overview. *International Journal of Social Economics, 30(1/2)*, 199-208.

Arena, A., & Azzone, G. (2005). ABC, Blanaced Scorecard, EVA: an empirical study on the adpotion of innovative management accounitng techniques. *International Journal of auditing and Perfromance Evaluation, 2(3)*, 206-225.

Armstrong, J. (1975). Too much emphasis on new ways, not enough on applying the 'old'. *Management Accounting, February*, 49-50.

Armstrong, J., & Overton, T. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, 396-402.

Armstrong, P. (1987). *The abandonment of productive intervention in management teaching syllabi: an historical analysis.* Coventry: Warwick papers in Industrial Relations, No 15, Industrial Relations Research Unit, University of Warwick.

Ashton, D., Hopper, T., & Scapens, R. (1995). Issues in Management Accounting. In D. Asston, T. Hopper, & R. Scapens, *Issues in Management Accounting* (p. 2). London: Prentice Hall.

Atkinson, A., Balakrishnan, R., Booth, P., Cote, J., Groot, T. M., Roberts, h., . . . Wu, A. (1997). New directions in management accounting research. *Journal of Management Accounting Research, 9(79)*, 79-108.

Atkinson, H., & Jones, T. (2008). Financial management in the hospitality industry: themes and issues. In B. &. Brotherton, *The Sage Handbook of Hospitality Management.* (p. Chapter 10). London,: Sage.

Auzair, S., & Langfield-Smith, K. (2005). The effect of service process type , business strategy and life cycle stage on bureaucratic MCS in service organization. *Management Accounting Research*, 399-421.

Avlonitis, G., & Indounas, K. (2006). Pricing Practices of Service Organsations. *Journal of Services Marketing*, 346-356.

Ax, C., & Bjørnenak, T. (2007). Management accounting innovations: origins and diffusion. In T. Hopper, D. Northcott, & R. Scapens, *Issues in management accounting, 3rd ed.* (pp. 357-376). Harlow, Essex: Pearson Education.

Ax, C., Greve, J., & Nilsson, U. (2008). The impact of competition and uncertainty on the adoption of target costing. *International Journal of Production Economics, 115(1)*, 92-103.

Badem, A., Ergrin, E., & Drury, C. (2013). Is Standard Costing Still Used? Evidence from Turkish Automotive Industry. *International Business Research, 6(7)*, 79-90.

Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, organizations and society, 28(7)*, 675-698.

Baird, K., G. Harrison, G., & Reeve, R. (2004). Adoption of Activity Management Practices: A Note on the Extent of Adoption and the influence of Organisational and Cultural Factors. *Management Accounting Research 15 (4)*, 383-399.

Balderstone, S., & Keef, S. (1999). Throughput accounting: exploding and urban myth. *Management Accounting, October*, 26-28.

Baldvinsdottir, G., Mitchell, F., & Nørreklit, H. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research, 21(2)*, 79-82.

Banham, R. (2012). Freed from the Budget. *CFO*, 41-46, September.

Banker, R., & Johnston, H. (1988). Cost driver analysis in the service sector: am empirical study of US airlines. *Carnegie Mellon University Working Paper*.

Barfield, T., & Raiborn, C. (1994). *Cost Accounting: Traditions and Innovations.* St. Paul, MN: West.

Barley, S., & Tolbert, P. (1997). Institutionalization and structuration: Studying the links between action and institution. *Organization studies, 18(1)*, 93-117.

Baxter, J., & Chua, W. (2003). Alternative management accounting research – whence and whither. *Accounting, Organizations and Society, 28*, 97-126.

Becker, S., Messner, M., & Schaffer, U. (2009). The Evolution of a Management Accounting Idea: The Case of Beyond Budgeting. *Available at SSRN: http://ssrn.com/abstract=1535485 or http://dx.doi.org/10.2139/ssrn.1535485*, 1-61.

Berland, N., Boyns, T., & Zimnovitch, H. (2002). The influence of the accounting profession on the dissemination of costing in great britain & France: 1880-1950. *compatibilite - Control - Audit, May*, 189-208.

Beyer, R. (1955). Is direct costing the answer?'. *Journal of Accountancy, April*, 5.

Bhimani, A. (1994). Accounting enlightenment in the age of reason. *The European Accounting Review, 3(3)*, 399-442.

Bhimani, A., & Bromwich, M. (2010). *Management accouting:retrospect and prospect.* Oxford: CIMA Publishing.

Bhimani, A., Horngren, C., Datar, S., & Rajan, M. (2012). *Management and Cost Accounting 5th Ed.* Harlow: Pearson.

Bigg, W. (1950). *Cost Accounts, 6th edn.* London: Macdonald and Evans.

Bisman, J. (2010). Postpositivism and accounting research: A (personal) primer on critical realism. *Australasian Accounting, Business and Finance Journal, 4(4)*, 3-25.

Bjørnenak, T. (1997). Diffusion and accounting: the case of ABC in Norway. *Management Accounting Research, 8(1)*, 3-17.

Bjornenak, T., & Mitchell, F. (2010). The development of activity based costing journal literature (1987-2000). *European accounting Review, 11 (3)*, 481-508.

Bjornenak, T., & Olson, O. (1999). Unbundling Management Accounting Innovations. *Management Accounting Research, 10*, 325-338.

Bogale, E. (2013). Advanced management accounting techniques in manufacturing firms in Ethiopia. *Research Journal of Finance and Accounting, 4(16)*, 9-17.

Booth, P., Matolcsy, Z., & Wieder, B. (2000). Integrated information systems (ERP systems) and accounting practice – the Australian experience. *Paper presented*

at the Third European Conference on Accounting Information Systems, Munich, Germany, 27–28 March .

Bormistrov, A., & Kaabøe, K. (2013). From comfort to stretch zones: A field study of two multinational companies applying “beyond budgeting” ideas. *Management Accounting Research, 24*, 196-211.

Botta-Genoulaz, V., & Millet, P. (2005). An investigation into the use of ERP systems in the service sector. *International journal of production economics, 99(1)*, 202-221.

Bourne, M., Mills, J., Wilcox, M., Neely, A., & Platts, K. (2000). Designing, implementing and updating performance measurement systems. *International Journal of Operations & Production management*, 754-771.

Bowen, J., & Ford, R. (2002). Managing service organisations: does having a "thing" make a difference. *Journal of Management, 28(3)*, 447-469.

Bowhill, B., & Lee, B. (2002). The incompatibility of standard costing systems and modern manufacturing: insight or unproven dogma? *The Journal of Applied Accounting Research, 6(3)*, 1-24.

Boyns, T. (1998). Budgets and budgetary control in British businesses to c. 1945. *Accounting, Business & Financial History, 8(3)*, 261-301.

Boyns, T., & Edwards, J. (1997). The construction of cost accounting systems in Britain to 1900: the case of the coal, iron and steel industries. *Business History, 39(3)*, 1-29.

Boyns, T., Matthews, M., & Edwards, J. (2004). The development of costing in the British chemical industry, c1870 – c1940. *Accounting and Business Research, 34(1)*, 3-24.

Brady, K., Henson, P., & Fava, J. (1999). Sustainability, eco-efficiency, life-cycle management, and business strategy. *Environmental Quality Management, 8(3)*, 33-41.

Brewer, P. (2000). An Approach to Organising a Mangement Accounting Curriculum. *Accounting Education, 15(2)*, 211-235.

Bright, J., Davies, R., Downes, C., & Sweeting, R. (1992). The deployment of costing techniques and practices: a UK study. *Management Accounting Research, 3*, 201-211.

Brignall, S. (1997). A contingent rationale for cost system design in services. *Management Accounting Research, 8*, 325-346.

Brignall, T., & Ballantine, J. (1996). Performance Measurement in Service Businesses Revisited. *International Journal of Service Industry Management, 7(1)*, 6-31.

Brignall, T., Fitzgerald, L., Johnston, R., & Silvestro, R. (1992). Chapter 9 Linking Performance Measures and Competitive Strategies in Service Businesses: three case studies. In C. (. Drury, *Management Accounting Handbook* (pp. 196-21). Oxford.

Bromwich, M. (1988). Managerial accounting deffinition and scope - from a managerial view. *Management Accountant, 66(8)*, 26-27.

Bromwich, M. (1990). The case for strategic management accounting: the role of accounting information for strategy in competitive markets. *Accouting, Organizations and Society, 15(1)*, 27-46.

Bromwich, M., & Bhimani, A. (1989). *Management Accounting: Evolution not Revolution,.* London: CIMA.

Bromwich, M., & Bhimani, A. (1994). *Management Accounting Pathways to Progress.* London: CIMA publishing.

Bromwich, M., & Bhimani, A. (2010). *Management Accounting: retrospect and prospect.* London: Cima.

Brook, K. (2008). Developments in measuring the UK service industries, 1990 to 2006. *Economic & Labour Market Review, 2(1)*, 18-29.

Brook, K. (2009). Performance and employment characteristics of the UK service industries, 1990-2008. *Economics and Labour Market Review, 3(6)*, 39-50.

Bryman, A., & Bell, E. (2011). *Business research methods.* Oxford: Oxford university press.

Burns, J., & Scapens, R. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research, 11*, 3-25.

Burns, J., & Vaivio, J. (2001). Management accounting change. *Management accounting research, 12(4)*, 389-402.

Burns, J., & Yazdifar, H. (2001). Tricks or treats? the role of management accounting is changing. *Fiancial Management, March*, 33-35.

Burns, J., Ezzamel, M., & Scapens, R. (1999). Management accounting change in the UK. *Management Accounting*, 28-30.

Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis.* London: Heinemann.

Busco, C., Quattrone, P., & Riccaboni, A. (2007). Management accounting: issues in interpreting its nature and change. *Management Accounting Research, 18(2)*, 125-149.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and society, 33*, 836–863.

Cagwin, D., & Bouwman, M. (2002). The Association Between Activity-Based Costing And Improvement In Financial Performance. *Management Accounting Research, March*, 1-39.

California management review. (2000). *The strategy focused organisation.* Boston, MA: Harvard Business School Press.

Cardos, I., Pete, S., & Cardos, V. (2012). An overview on the adoption and implementation of activity based costing in practice. *Romainian Journal of Economics 35 (2)*, 185-200.

Carter, R. (1938). *Advanced Accounts.* London: Pitman & Sons.

Chandler, A. (1977). *The Visible Hand: The Managerial Revolution in American Business.* Cambridge, Mass: Harvard University Press.

Chanegrih, T. (2008). Applying a typology of management accounting change: A research note. *Management Accounting Research, 19(3)*, 278-285.

Chase, R. (1978). Where does the customr fit in a service operation? *Harvard Business Review, 56(4)*, 137-142.

Chase, R., & Apte, U. (2007). A history of research in service operations: What's the big idea? *Journal of Operations Mnagement, 25*, 375-386.

Chatfield, M. (1977). *A History of Accounting Thought.* New York: Robert E. Krieger Publishing Chicago Press.

Chenhall, R., & Euske, K. (2007). The role of management control systems in planned organizational change: An analysis of two organizations. *Accounting, Organizations and Society, 32(7)*, 601-637.

Chenhall, R., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: an Austrailian study. *Management Accounting Research, 9*, 1-19.

Chua, W. (1986). Radical developments in accounting thought. *Accounting review*, 601-632.

CIMA & ICAEW. (2004). *Better Budgeting.* London: silverdart Ltd.

CIMA. (2011, March). *Press release: CIMA and AICPA embark on international management accounting initiative.* Retrieved from CIMA : http://www.cimaglobal.com/About-us/Press-office/Press-releases/2011/March-2011/cima-aicpa-jv/

CIMA. (2013). *Essential tools for management Accountants.* London: CIMA.

CIMA. (2014). *Global Management Accounting Principles.* London: CIMA.

Cinquini, L., & Tenucci, A. (2007). Is the adoption of Strategic Management Accounting techniques really "strategy-driven"? Evidence from a survey. *Munich Personal RePEc Archive Paper No. 11819*, 1-27.

Cinquini, L., & Tenucci, A. (2010). Strategic management accounting and business strategy: a loose coupling? *Journal of Accounting & Organizational Change, 6(2)*, 228-259.

Clark, P. J., Hall, N., & Stevens, K. (2002). Activity-based costing in Ireland. Barriers to, and opportunities for, change. *Critical Perspectives on Accounting, 10*, 443-468.

Clinton, B., & Graves, A. (1999). Product value analysis: strategic analysis over the entire product life cycle. *Journal of Cost Management, 13*, 22-30.

Clinton, D., & White, L. (2012). The Role of the Management Accountant: 2003-2012. *Mangement Accounting Quarterly, 14(1)*, 40-74.

Coad, A., & Glyptis, L. (2014). Structuration: A position–practice perspective and an illustrative study. *Critical Perspectives on Accounting, 25(2)*, 142-161.

Coad, A., & Herbert, I. (2009). Back to the future: New potential for structuration theory in management accounting research? *Management Accounting Research, 20(3)*, 177-192.

Coad, A., Jack, L., & Kholeif, A. (2015). Structuration theory: reflections on its further potential for management accounting research. *Qualitative Research in Accounting & Management, 12(2)*, 153-171.

Cobb, I., Helliar, C., & Innes, J. (1995). Management accounting change in a bank. *Management accounting research, 6(2)*, 155-175.

Cokins, G. (2002). Integrating target costing and ABC. *Journal of Cost Management*, 13-22.

Collier, P. (2012). *Accounting for Managers:interpreting accounting information for decision-making 4th Ed.* Chichester: John Wiley & Sons.

Collier, P., & Gregory, A. (1995). Strategic management accounting:a UK hotel sector case study. *International Journal of Contemporary Hospitality Management*, 16-21.

Colquhoun, G. (2005). The Changing Structure of the UK Economy: Implications for the Current Account. *Economic Outlook, April*, 9-15.

Cooper, R. (1996). Look out, management accountants. *Management Accounting, 74(5)*, 20-27.

Cooper, R., & Kaplan, R. (1988a). how cost accounting distorts product costs. *Management Accounting (US), 67(10)*, 20-27.

Cooper, R., & Kaplan, R. (1988b). Measure costs right: make the right decisions. *Harvard business Review, September-October*, 96-103.

Cooper, R., & Kaplan, R. (1991). Profit priorities from activity-based costing. *Harvard Business Review, May-June*, 130-135.

Cotton, B. (2005). Relevance redux - management accounting today. *Chartered Accountnas Journal, April,*, 6-12.

Covaleski, M., Dirsmith, M., & Samuel, S. (1996). Managerial accounting research: the contributions of organizational and sociological theories. *Journal of Management Accounting Research, 8*, 1-36.

Covey, R. (1990). Foreword activity based management:. In A. Andersen, *Arthur Andersen's lessons from the ABM battlefied* (p. 34). New York: Wiley.

Cravens, k., & Guilding, C. (2001). An empirical study of the application of strategic management accounting techniques. *Advances in Management Accounting, 10*, 95-124.

Creswell, J. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (3rd. ed.).* London: Sage Publications Ltd.

Cross, K., & Lynch, R. (1992). For good measure. *CMA Magazine, April*, 20-23.

Cugini, A., Carù, A., & Zerbini, F. (2007). The Cost of Customer Satisfaction: A Framework for Strategic Cost Management in Service Industries. *European Accounting Review, 16(3)*, 499-530.

Cui, D. (2011). *Service Industry in China.* Hong Kong: BoA/Meryll Lynch.

Cunliffe, A. (2010). Crafting qualitative research: Morgan and Smircich 30 years on. *Organizational Research Methods 14(4)*, 647-673.

Currie, W. (1993). The strategic management of AMT in Japan, USA, the UK and West Germany. *Management Accounting, 71 (1)*, 56-58.

Dalci, I., & Tanis, V. K. (2010). Customer profitability analysis with time-driven activity-based costing: a case study in a hotel. *International Journal of Contemporary Hospitality Management, 22(5)*, 609-637.

Dale, B., & Wan, G. (2002). Setting up a quality costing system: An evaluation of the key issues. *Business Process Management Journal, 8(2)*, 104-116.

Daum, J., & Hope, J. (2003). The origins of Beyond Budgeting and of the Beyond Budgeting Round Table (BBRT) - An interview with Jeremy Hope.

Davies, A., & Kochhar, A. (1999). Why British companies don't do effective benchmarking. *Integrated Manufacturing Systems, 10(1)*, 26-32.

Davies, R., & Sweeting, R. (1991). Surmount major barriers and establish new techniques. *Managemetn Consultancy, January*.

Davila, T., & Oyon, D. (2008). Cross-paradigm collaboration and the advancement of management accounting knowledge. *Critical Perspectives on Accounting, 19(6)*, 887-893.

Dean, J. (1951). *Capital Budgeting, .* New York: Columbia University press.

Develin and Partners. (1988). *The effectiveness of the corporate overhead in British business.* London: Develin and Partners.

Dijkman, A. (2008). Budgeting practices of listed companies in the Netherlands. *Management Accounting Quarterly, 10(1)*, 26-36.

DiMaggio, P., & Powell, W. (1991). Introduction. In P. DiMaggio, & W. Powell (Eds), *The new institutionalism in organizational analysis (Vol. 17).* Chicago, IL: University of Chicago Press.

Drew, S., & Morgan, D. (2007). The launch of the index of services as a national statistic. *Economic & labour market review, 1(3)*, 39-46.

Drury, C. (1998). Management Accounting Information Systems in UK Building Societies. *The Services Industries Journal, 18(2)*, 125-143.

Drury, C. (2012). *Management and Cost Accounting.* London: Cengage.

Drury, C., & Tayles, M. (1996). UK capital budgeting practices: some additional survey evidence. *The European Journal of Finance, 2*, 371-388.

Drury, C., & Tayles, M. (2000). *Cost system design and profitability analysis in UK companies.* London: CIMA.

Drury, C., Braund, S., Osbourne, P., & Tayles, M. (1993). *A Survey of Management Accounting Practices in UK Manufacturing Companies.* London: The Chartered Association of Certified Accountants.

Dugdale, D. (1994). Theory and practice: The views of CIMA members and students. *Management Accounting, 72(8)*, 56-61.

Dugdale, D., & Jones, C. (1997). The theory of constraints: transforming ideas? *British Accounting Review (30)*, 73-91.

Dugdale, D., & Jones, C. (1998). Throughput Accounting: transforming practices? *British Accounting Review (30)*, 203-220.

Dugdale, D., & Jones, C. (2003). Batles in the costing war: UK debates 1950-1975. *Accounting, Business & Financial Histories, 13(3)*, 305-338.

Dugdale, D., Jones, C., & Green, S. (2006). *Contemporary Management Accounting Practices in UK Manufacturing.* London: CIMA.

Dunk, A. (2004). Product life cycle cost analysis: the impact of customer profiling, competitive advantage, and quality of IS information. *Management Accounting Research, 15*, 401-414.

Easterby-Smith, M., Thorpe, R., & Jackson, P. (2012). *Management research.* London: Sage.

Eccles, R. (1991). The Performance Measurement Manifesto. *Harvard Business Review, January-February*, 131-137.

Economic Outlook. (2005). *The changing structure of the UK Economy: Implications for the Current Account.* Oxford: Blackwells.

Edwards, K., & Emmanuel, C. (1990). Diverging views on the boundaries of management accounting. *Management Accounting Research, 1(1)*, 51-63.

Edwards, R. S. (1937). The Rationale of Cost Accounting. *Accountant, 47*, 389-390.

Ekholm, B., & Wallin, J. (2000). Is the annual budget really dead? *The European Accounting Review, 9(4)*, 519-539.

Elmakis, D., & Lisnianski, A. (2006). Life cycle cost analysis: Actual problem in industrial management. *Journal of Business Economics and Management, 7(1)*, 5-8.

Elnathan, D., Lin, T. W., & Young, S. (1996). Benchmarking and management accounting: A framework for research. *Journal of Management Accounting Research, 8*, 37-54.

Englund, H., & Gerdin, J. (2011). Agency and structure in management accounting research: reflections and extensions of Kilfoyle and Richardson. . *Critical Perspectives on Accounting, 22(6)*, 581-592.

Englund, H., & Gerdin, J. (2014). Structuration theory in accounting research: Applications and applicability. *Critical Perspectives on Accounting, 25(2)*, 162-180.

Englund, H., Gerdin, J., & Burns, J. (2011). 25 Years of Giddens in accounting research: Achievements, limitations and the future. *Accounting, Organizations and Society, 36(8)*, 494-513.

Ernst and Young. (2003). *2003 Survey of Management Accounitng.* New York: Ernst and Young.

Eurostat. (2009). *CPA 2008 Introductory Guidelines.* Luxembourg: Office for Official Publications of the European Communities.

Evans, H., Ashworth, G., Gooch, J., & Davies, R. (1996). Who needs performance management? *Managerment Accounting, 74*, 20-25.

Ezzamel, M., Hoskin, K., & Macve, R. (1990). Managing it all by numbers: a review of Johnson and Kaplan's "relevance Lost". *Accounting and Business Research, 78*, 153-166.

Ezzamel, M., Lilley, S., & Willmott, H. (1996). The View from the Top: Senior Executives' Perceptions of Changing Management Practices in UK Companies. *British Journal of Management, 7(2)*, 155-168.

Ezzamel, M., Scapens, R., Baldvinsdottir, G., & Burns, J. (2003). *The future direction of UK management accounting practice.* London: Cima Publishing.

Farouk Abdel Al, S., & McLellan, J. (2011). Management accounting practices in Egypt-a transitional economy country. *Available at SSRN: http://ssrn.com/abstract=1828762* .

Fekrat, A. (1972). The Conceptual Foundations of Absorption Costing. *The Accounting Review, 47(2)*, 351-355.

Ferrara, W. (1995). Cost and management accounting: the 21st century paradigm. *Management Accounting, 36*, 30-34.

Ferrera, W. L. (1990). The new cost/management accounting: more questions than Answers: Is the management accounting system as hopless as the critics say? *Management Accounting, October*, 48-52.

Filomena, T., Neto, F., & Duffey, M. (2009). Target costing operationalization during product development: Model and application. *International Journal of Production Economics, 118(2)*, 398-409.

Finnie, J. (1986). Financial evaluation of advanced manufacturing systems. *Proceedings of the UK Operations Management Association Conference* (pp. 209-222). Kempston, Beds: IFS Publications.

Fisher, I. (1930). *The theory of Interest.* New York: MacMillan & Co.

Fitzgerald, L., & Moon, P. (1996). *Performance Measurement in Service Industries: Making it Work.* London: CIMA.

Fitzgerald, L., Johnston, R., Silvesyro, R., & Voss, C. (1991). *Performance Measurement in Service Business.* London: CIMA.

Fleischman, R. K., & Macve, R. H. (2002). Coals from Newcastle: an evaluation of alterative frameworks for interpreting the development of cost and management accounting in Northeast coal mining during the British Industrial Revolution. *Accounting and Business Research, 32(3)*, 133-152.

Fleischman, R. K., & Tyson, T. N. (1998). The Evolution of Standard Costing in the UK and US From Decision Making to Control. *Abacus, 31 (1)*, 92-119.

Fleischman, R., Boyns, T., & Tyson, T. (2008). The search for standard costing in the United States and Britain. *Abacus, 44(4)*, 341-376.

Foster, G., & Gupta, M. (1988). Manufacturing overhead cost driver analysis. *Stanford University Working Paper*.

Foster, G., & Gupta, M. (1994). Marketing, cost management and management accounting. *Journal of Management Accounting Research, 6*, 43-77.

Francis, G., & Holloway, J. (2007). What have we learned? Themes from the literature on best-practice benchmarking. *International Journal of Management Reviews, 9(3)*, 171-189.

Freeman, M., & Hobbs, J. (1991). Capital budgeting: Theory versus practice. *Australian Accountant, September, 6*, 36-41.

Galloway, D., & Waldron, D. (1988a). Throughput Accounting—1: The need for a new language for manufacturing. *Management Accounting, November*, 34-35.

Galloway, D., & Waldron, D. (1988b). Throughput Accounting—2: Ranking products profitability. *Management Accounting, December*, 34-35.

Galloway, D., & Waldron, D. (1989). Throughput Accounting—3: A better way to control labour costs. *Management Accounting, January*, 32-33.

Garcke, E., & Fells, J. (1887). *Factory Accounts: Their Principles and Practice,.* London: Crosby Lockwood and Son (4th edn reprinted, 1976 by Arno Press).

Gartner, B., & Krichbaum, A. (2014, May). *The role of maangement accountants in the use of ERP systems in large companies.* Retrieved September 26, 2015, from www.Researchgate.net: http://www.researchgate.net/profile/Bernhard_Gaertner/publication/263932509_THE_ROLE_OF_MANAGEMENT_ACCOUNTANTS_IN_THE_USE_OF_ERP_SYSTEMS_IN_LARGE_COMPANIES/links/0deec53c6319b0c1ce000000.pdf

Geri, N., & Ronen, B. (2005). Relevance lost: the rise and fall of activity based costing. *Human Systems management , 24*, 133-144.

Ghalayini, A., & Noble, J. (1996). The changing basis of performance measurement. *International Journal of Operations & Production Management, 16 (8)*, 63-80.

Ghauri, P., & Grønhaug, K. (2010). *Research Methods in Business Studies, 4th Ed.* London: FT.

Ghosh, B., & Chan, Y. (1996). *Management Accounting Practices in Singapore: The State of the Art (Unpublished manuscript).* Singapore: Nanyang Business School.

Ghosh, B., & Chan, Y. (1997). Management accounting in Singapore-well in place? *Managerial Auditing Journal, 12(1)*, 16-18.

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration.* Cambridge: Polity Press.

Gill, J., & Johnson, P. (2010). *Research methods for managers.* London: Sage.

Gioia, D., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of management review, 15(4)*, 584-602.

Glover, G., & Williams, R. (1928). *The Elements of Costing, 2nd edn.* London: The Gregg Publishing Company Limited.

Glucker, J., & Hammer, I. (2011). A pragmatic service typology: capturing the distinctive dymanics of services in time and space. *The Service Industries Journal 31(6)*, 941-957.

Goode, M., & Malik, A. (2011). Beyond budgeting: the way forward? *Pakistan Journal of Social Sciences, 31 (2)*, 207-214.

Gosselin, M. (1997). The Effect of Strategy and Organisational Structure on the Adoption and Implementation of Activity-based costing. *Accounting, Organisations and Society 22 (2)*, 105-122.

Graham, J., & Harvey, C. (2001). The theory and practice of corporate Finance: evidence from the field. *Journal of Business Finance, 60*, 187-243.

Grando, A., Tapiero, C., & Belvedere, V. (2007). Operational performances in manufacturing and service industries: conceptual framework and research agenda. *International Journal of Business Performance Management, 9(2)*, 110-126.

Granlund, M., & Lukka, K. (1998). It's a small world of management accounting practices. *Journal of Management Accounting Research, 10*, 153-179.

Granlund, M., & Malmi, T. (2000). Some empirical evidence of ERP-systems on management accounting. *Paper presented at the 23rd Conference of the EAA, Munich, Germany, 29–31 March*.

Granlund, M., & Malmi, T. (2002). Moderate impact of ERPs on management accounting: a lag or permanent outcome? *Management Accounting Research, 13(3)*, 299-321.

Griffiths, A., & Wall, S. (2012). *Applied Economics.* Harlow: Pearson Education Limited.

Groot, T. (1999). Activity - Based Costing in U.S. and Dutch Food Companies. *Advances in Management Accounting, 7*, 47-63.

Guba, E. (1990). *The paradigm dialog.* Newbury Park, CA: Sage Publications.

Guilding, C. (1992). Should management accounting take up the brand valuation challenge? *Management Accounting, 70*, 44-46.

Guilding, C. (1999). Competitor-focused accounting: an exploritory note. *Accounting, Organizations and Society, 24*, 583-595.

Guilding, C., & Godfrey, A. (1995). An empirical investigation of the extent and nature of brand valuation activity in New Zealand. *Accounting & Finance, 35(2)*, 119-134.

Guilding, C., & McManus, L. (2002). The incidence, perceived merit and antecedents of customer accounting: an exploratory note . *Accounting, Organizations and Society, 27*, 45-59.

Guilding, C., & Pike, R. (1994). Brand valuation: a model and empirical study of organisational implications. *Accounting and Business Research, 24 (95)*, 241-254.

Guilding, C., Cravens, K., & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management Accounitng Research, 11(1)*, 113-135.

Guilding, C., Lamminmaki, D., & Drury, C. (1998). Budgeting and standard costing practices in New Zealand and the UK. *The International Journal of Accounting, 33(5)*, 569-588.

Gulch, P., & Baumann, H. (2004). The life cycle costing (LCC) approach: a conceptual discussion of its usefulness for environmental decision-making. *Building and Environment, 39(5)*, 571-580.

Gupta, K., & Gunasekaren, A. (2005). Costing in new enterprise environment: a challenge for managerial accounting researchers and practitioners. *Managerial Auditing Journal, 20(4)*, 337-353.

Gupta, S., & Lehmann, D. (2003). Customers as assets. *Journal of Interactive Marketing, 17(1)*, 9-24.

Gupta, S., Lehmann, D., & Stuart, J. (2004). Valuing customers. *Journal of marketing research, 41(1)*, 7-18.

Haktanir, M., & Harris, P. (2005). Performance Measurement in an independent hotel context. *International Journal of Contemporary Hospitality Management, 17(1)*, 39-50.

Haldma, T., & Lääts, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management Accounting Research, 13(4)*, 379-400.

Haldma, T., & Lääts, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management Accounting Research, 13(4)*, 379-400.

Halford, D. (1959). *Differential Costs and Management Decisions.* London: Pitman & Sons.

Hansen, D., & Mowen, M. (1992). *Management Accounting.* Cincinnati, OH: South-Western.

Hanson, S. (2011). A Theoretical Analysis of the Impact of Adopting Rolling Budgets, Activity-Based Budgeting, and Beyond Budgeting. *European Accounting Review, 20(2)*, 289-319.

Harris, J. (1936). 'What did we earn last month?'. *NACA Bulletin, January*, 15.

Harris, P., & Brander-Brown, J. (1998). Research and development in accounting and financial management. *International Journal of Hospitality Management, 17(2)*, 161-181.

Hayes, R., & Abernathy, W. (1980). Managing our way to economic decline. *Harvard Business Review, 62*, 95-101.

Hayes, R., Wheelwright, S., & Clark, K. (1988). *Dynamic Manufacturing: Creating the Learning Organization.* New York: Free Press.

Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative market research: An international journal, 3(3)*, 118-126.

Heineke, J., & Davis, M. (2007). The emergence of service operations management as an academic discipline. *Journal of Operations Management, 25*, 364-374.

Heinen, C., & Hoffjan, A. (2005). The strategic relevance of competitor cost assessment:an empirical study of competitor accounting. *Journal of Applied Management Accounting Research, 3(1)*, 17-34.

Hepworth, S. (1954). Direct Costing: the case against. *The Accounting Review, 29(1)*, 94-99.

Hergert, M., & Morris, D. (1989). Accounting data for value chain analysis. *Strategic Management Journal, 10*, 175-188.

Heysford, J. (2001). An Empirical Investigation of Accounting Information Use in Competitive Intelligence. *Proceedings, American Accounting Association, Annual Meeting, Atlanta*.

Hicks, J. (1946). *Value and Capital.* London: Clarendon press.

Hilton, R. (2001). *Managerial accounting: creating value in a dynamic business environment, 5th ed.* New York: McGraw Hill.

Hipp, C., & Grupp, H. (2005). Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. *Research Policy, 34*, 517-535.

Hope, J., & Fraser, R. (1997). Beyond budgeting...breaking through the barrier to 'the third wave'. *Management Accounting, 75(11),*, 20-23.

Hope, J., & Fraser, R. (1999). Beyond Budgeting: building a new management model for the information age. *Management Accounting, 1*.

Hopper, T., & Armstrong, P. (1991). Cost accounting, controling labour and the rise of the conglomerates. *Accounting, Organisations and Society, 16*, 405-438.

Hopper, T., & Powell, A. (1985). Making sense of research into the organizational and social aspects of management accounting: A review of its underlying assumptions. *Journal of management Studies, 22(5)*, 429-465.

Hopper, T., Cooper, D., Lowe, T., Capps, T., & Mouritsen, J. (1986). Management control and worker resistance in the National Coal Board: financial controls in the labour process. In D. Knights, & H. Willmot (Eds), *Manageing the labour Process* (pp. 109-141). London: Gower.

Hopper, T., Kirkham, L., Scapens, R., & Turley, S. (1992). Does financial accounting dominate management accounting—a research note. *Management Accounting Research, 3*, 307-311.

Hopper, T., Otley, D., & Scapens, R. (2001). British Management Accounting Research: Whence and Whither: Opinions and Recollections. *British Accounting Review, 33*, 263-291.

Hopwood, A. (1985). The tale of a committee that never reported: disagreements on intertwining accounting with the socia. *Accounting, Organizations and Society, 10(3)*, 361-377.

Horngren, C. (1989). Cost and management accounting: yesterday and today. *Journal of Management Accounting Research, 1(1)*, 21-32.

Horngren, C. (2004). Management Accounting: Some Comments. *Journal of Management Accounting Research, 16*, 207-211.

Horngren, C., Foster, G., & Datar, S. (2000). *Cost Accounting: A Managerial Emphasis.* New Jersey: Prentice Hall.

Hussain, M., & Gunasekaran, A. (2002a). An institutional perspective of non-financial management accounting measures: a review of the financial services industry,. *Managerial Audit Journal, 17(9)*, 518-536.

Hussain, M., & Gunasekaran, A. (2002b). Non-financial management accounting measures in Finnish financial institutions. *European Business Review, 14(3)*, 210-229.

Hussey, J., & Hussey, R. (1997). *Business research. A practical guide for undergraduate and postgraduate students.* Houndsmills: Macmillan.

Hyvonen, J. (2005). Adoption and benefits of management accounting systems: Evidence from Finland and Austrailia. *Advances in International Accounting*, Vol 1.

Hyvönen, T. (2003). Management accounting and information systems: ERP versus BoB. *European Accounting Review, 12(1)*, 155-173.

ICWA. (1950). *An Introduction to Budgetary Control, Standard Costing, Material Control and Production Control.* London: Institute of Cost and Works Accountants.

ICWA. (1961). *A Report on Marginal Costing.* London: ICWA.

Ilias, A., Razak, M., & Yasoa, M. (2010). The preliminary study of management accounting practices (MAPs) in small business. *Global Business and Management Research: An International Journal, 2(1)*, 79-88.

Innes, J., & Mitchell, F. (1990). The process of change in management accounting: some field study evidence. *Management Accounting Research, 1(1)*, 3-19.

Innes, J., & Mitchell, F. (1995). A survey of activity based costing in the UK's largest companies. *Management Accounting Research, 6*, 137-153.

Innes, J., & Mitchell, F. (1997). The Application of Activity-based Costing in the United Kingdom's Largetst Financial Institutions. *The Service Idustries Journal, 17(1)*, 190-203.

Innes, J., Mitchell, F., & Sinclair, D. (2000). Activity-based costing the UK's largest companies. *Management Accounting Research, 6*, 137-153.

International Federation of Accountants. (1998). *International Management Accounting Practice Statement: Management Accounting Concepts,.* New York: IFAC.

Ittner, C., & Larcker, D. (1998). Are non-financial measures leading indicators of financial per formance? An analysis of customer satisfaction . *Journal of Accounting Research 26*, 1-26.

Jack, L. (2009). The adoption of strategic management accounting tools in agriculture post subsidy reform: a comparative study of practices in the UK, the US, Austrailia and New Zealand. *CIMA, Research executive summaries series*, Vol.5, Issue 7.

Jack, L., & Kholeif, A. (2008). Enterprise resource planning and a contest to limit the role of management accountants: a strong structuration perspective. *Accounting Forum Vol. 32, No. 1*, 30-45.

Jackson, A., & Lapsley, I. (2003). The diffusion of accounting practices in the new "managerial" public sector. *The International Journal of public Sector Management, 16(5)*, 359-372.

Jain, D., & Singh, S. (2002). Customer lifetime value research in marketing: a review and future direction. *Journal of Interactive marketing, 16 (2)*, 34-46.

Jarvenpaa, M. (1998). Management Accounting and strategy. Functional and Institutional perspectives; A case study. *Proceedings, Asia Pacific Interdisciplinary Research in Accounting Conference, Osaka, Japan*.

Järvenpää, M. (2009). The institutional pillars of management accounting function. *Journal of Accounting & Organizational Change, 5(4)*, 444-471.

Johansson, T., & Siverbo, S. (2009). Why is research on management accounting change not explicitly evolutionary? Taking the next step in the conseptualisation of management accounting change. *Management Accounting Research, 20*, 146-162.

Johnson, H. (1975). The Role of Accounting History in the Study of Modern Business Enterprise. *The Accounting Review, July*, 444-450.

Johnson, H. (1978). Management accounting in an early multidivisional organization: general motors in the 1920s. *The Business History Review, 52 (4)*, 490-517.

Johnson, H. (1981). Toward a new understanding of nineteenth-century cost accounting. *Accounting Review, 56 (3)*, 510-518.

Johnson, H., & Kaplan, R. (1987). *Relevance Lost: The Rise and Fall of Management Accounting.* Boston: Harvard Business School Press.

Jones, C., & Dugdale, D. (2000). The making of new mangement accounting:a comparitive analysis of ABC and TOC. *Interdisciplinary Perspectives on Accounting Conference*, 1-29.

Jones, C., & Dugdale, D. (2002). The ABC bandwagon and the juggernaut of modernity. *Accounting, Organizations and Society 27* , 121-163.

Jones, J. (2013, September 6). *UK service industries: definition, classification and evolution.* Retrieved from Office for National Statistics: www.ons.gov.uk/ons/rel/.../national.../uk-service-industries-pdf

Jones, L. (1988). Competitor cost analysis at Caterpillar. *Managemetn Accounting (US), 70, October*, 32-38.

Jones, M., Munday, M., & Brinn, T. (1998). Speculations on barriers to the transference of Japanese management accounting. *Accounting, Auditing and Accountability Journal, 11 (2)*, 204-215.

Jones, T. (2008). Improving hotel budgetary practice—A positive theory model. *International Journal of Hospitality Management, 27*, 529-540.

Jones, T., Atkinson, H., Lorenz, A., & Harris, P. (2012). *Strategic Managerial Accounting: Hospitality, Tourism and Events Applications.* Oxford: Goodfellow Publishers.

Jones. C. (2004). A "scorecard" for service excellence. *Measuring Business Excellence, 8(4)*, 45-54.

Jordan, J., & Harris, G. (1920). *Cost Accounting: Principles and Practice.* New York: The Ronald Press Company.

Joseph, N., Turley, S., Burns, J., Lewis, L., Scapens, R., & Southworth, A. (1996). External financial reporting and management information :a survey of U .K . management accountants. *Management Accounting Research, 7*, 73-93.

Joshi, P. L. (2001). The international diffusion of new management accounting practices: the case of India. *Journal of International Accounting, Auditing and Taxation, 10*, 85-109.

Joshi, P., Bremser, W., Deshmukh, A., & & Kumar, R. (2011). Diffusion of Management Accounting Practices in Gulf Cooperation Council Countries. *Accounting Perspectives, 10(1)*, 23-53.

Kaplan, R. (1983). Measuring manufacturing performance: A new challenge for management accounting research. *The Accounting Review, LVIII Oct*, 686-705.

Kaplan, R. (1984). The Evolution of Management Accounting. *The Accounting Review, LIX, 3*, 390-418.

Kaplan, R. (1984b). Yesterday's accounting undermines production. *Harvard Business Review, July-Aug*, 95-101.

Kaplan, R. (1985). Accounting lag: the obsolescence of cost accounting systems (chapter 5). In K. Clark, R. Hayes, & C. Lorenz, *The Uneasy Alliance: Managing the productivity-technology dilemma* (pp. 195-226). Boston: Harvard Business School Press.

Kaplan, R. (1990). Limitations of cost accounting in advanced manufacturing environments. In R. Kaplan, *Measures for Manufacturing Excellence* (pp. 91-126). Boston: Harvard Business School University Press.

Kaplan, R. (1994). Management Accounting (1984-1994): development of new practice and theory. *Management Accounting Research, 5*, 247-260.

Kaplan, R. (2011). Accounting scholarship that advances professional knowledge and practice. *The Accounting Review, 86(2)*, 367-383.

Kaplan, R., & Anderson, S. (2004). Time-driven activity based costing. *Harvard Business Review, November*, 1-18.

Kaplan, R., & Attkinson, A. (1998). *Advanced Management Accounting, .* Englewood Cliffs, NJ: Prentice Hall.

Kaplan, R., & Narayanan, V. (2001). *Customer Profitability Measurement and Management.* Boston: Harvard Business School Press.

Kaplan, R., & Norton, D. (1993). Putting the balanced scorecard to work. *Harvard Business Review, 71(3)*, 134-147.

Kaplan, R., & Norton, D. (1996a). *The Balanced Scorecard.* Boston, MA: Harvard Business School Press.

Kaplan, R., & Norton, D. (1996b). Linking the balanced scorecard to strategy. *California management review, 39(1)*, 53-79.

Kaplan, R., & Norton, D. (2000). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment.* Boston, MA: Harvard Business Press.

Kaplan, R., & Norton, D. (2001). Transforming the balanced scorecard from performance measurement to strategic management. *Accounting horizons, 15(1)*, 87-104.

Kaplan, R., & Norton, D. (2004). The strategy map: guide to aligning intangible assets. *Strategy & Leadership, 32(5)*, 10-17.

Kaplan, R., & Norton, N. (1992). The balanced scorecard: measures that drive performance. *Harvard Business Review*, 71-79.

Kaplan, R., Shank, J., Horngren, C., Boer, G., Ferrara, W., & Robinson, M. (1990). Contribution margin analysis: no longer relevant/strategic cost management new paradigm. *Journal of Management Accounting Research, 2(1)*, 21-24.

Kasurinen, T. (2002). Exploring management accounting change: the case of balanced scorecard implementation. *Management accounting research, 13(3)*, 323-343.

Kelly, M., & Pratt, M. (1992). Purposes and paradigms of management accounting: beyond economic reduction. *Accounting Education, 1(3)*, 225-246.

Kester, G., Chang, R., Echanis, E., Haikal, S., Isa, M., Skully, M., . . . Wang, C. (1999). Capital budgeting practices in the Asia-Pacific region: Australia, Hong Kong, Indonesia, Malaysia, Philippines, and Singapore. *Financial Practice and Education, 9*, 25-33.

Khamalah, J., & Lingaraj, B. (2007). TQM in the service sector: a survey of small businesses. *Total quality management, 18(9)*, 973-982.

Khan, K., & Shah, A. (2011). Understanding performance measurement through the literature. *African Journal of Business Management, 5(35)*, 13410-13418.

Kim, S., Mabin, V., & Davies, J. (2008). The theory of constraints thinking processes: retrospect and prospect. *International Journal of Operations & Production Management 28(2)*, 155-184.

Laine, T., Paranko, J., & Soumala, p. (2012). Management accounting roles in supporting servitisation. *Managing Service Quality, 22(3)*, 212-232.

Lam, P. (2013, June 24). *http://www.pat-lam.com/?page_id=12*. Retrieved from http://www.pat-lam.com: http://www.pat-lam.com/?page_id=12

Lancaster, K. (1966). A new approach to consumer theory. *Journal of Political Economy*, 132-157.

Lancaster, K. (1979). *Variety, equity and efficiency: product variety in an industrial society.* New York: Columbia University press.

Langfield-Smith, K. (2008). Strategic management accounting: How far have we come in 25 years? *Accounting, Auditing and accountability Journal, 21(2)*, 204-228.

Lapsley, I., & Pettigrew, A. (1994). Meeting the challenge: accounting for change. *Financial Accountability & Management, 10(2)*, 79-92.

Laughlin, R. (1995). Empirical research in accounting: alternative approaches and a case for 'middle-range thinking'. *Accountng, Auditing and Accountability, 8(1)*, 63-87.

Laughlin, R., & Lowe, A. (1990). A critical analysis of accounting thought. In D. Cooper, & T. Hopper (eds), *Critical Accountants* (pp. 15-38). London: Macmillan Press.

Lee, B., Collier, P. M., & Cullen, J. (2007). Reflections on the use of case studies in the accounting, management and organizational disciplines. *Qualitative Research in Organizations and Management: An International Journal, 2(3)*, 169-178.

Lee, C. (1996). The service sector and economic growth. *Refresh, 22*, 5-8.

Lefley, F. (1997). Modified internal rate of return: will it replace IRR. *Management Accounting, January, 75*, 64-66.

Libby, T., & Lindsay, R. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research, 21(1)*, 56-75.

Libby, T., & Waterhouse, J. (1996). Predicting change in management accounting systems. *Journal of management accounting research, 8*, 137.

Loft, A. (1988). *Understanding Accounting in its Social and Historical Context: The case of Cost Accounting in Britain 1914-1925.* New York: Garland.

Loft, A. (1990). *Coming into the Light.* London: CIMA.

Loft, A. (1995). The History of Management Accounting Relevance Found. In D. Ashton, T. Hopper, & R. W. Scapens, *Issues in Management Accounting* (pp. 21-44). London: Prentice Hall.

Longton, L. (2003). When life gives you lemons. *Overdrive, 43(4)*, 9.

Lord, B. (1996). Strategic Management Accounting: The Emperor's New Clothes? *Management Accounting Research, 7(3)* , 347-366.

Lorino, P. (1995). Target Costing Practices and Implementation. *Federation of Accountants: Articles of Merit.(/www.ifac.org/StandardsAndGuidance/FMC/ArticlesOfMerit95/AOM9509.html)*.

Lovelock, C. (1983). Classifying services to gain strategic marketing insights. *Journal of marketing, 47*, 9-20.

Lowry, J. (1990). Management Accounting and Service Industries: An exploratory Account of Historical and Current Economic Contexts. *ABACUS, 26(2)*, 159-184.

Lowry, J. (1993). Management Accounting's Diminishing Post-industrial Relevance: Johnson and Kaplan Revisted. *Accounting and Business Research, 23(90)*, 169-180.

Lucas, M. (1997). Standard costing and its role in today's manufacturing environment. *Management Accounting, 75(4)*, 32-34.

Lucas, M. (2000). The reality of product costing. *Management Accounting, 78(2)*, 28-31.

Luft, J., & Shields, M. (2002). Zimmerman's contentious conjectures: describing the present and prescribing the future of empirical management accounting research. *European Accounting Review, 11(4)*, 795-803.

Lukka, K. (2007). Management accounting change and stability: loosely coupled rules and routines in action. *Management Accounting Research, 18(1)*, 76-101.

Lukka, K., & Granlund, M. (1996). Cost accounting in Finland: current practice and trends of development. *European Accounting Review, 5(1)*, 1-28.

Lukka, K., & Kasanen, E. (1995). The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal, 8(5)*, 71-90.

Lumby, S., & Jones, C. (2000). *Fundamentals of Investment Appraisal.* London: Thomson Learning.

Lyall, D., & Graham, C. (1993). Managers' attitudes to cost information. *Management decision, 31(8)*, 41-45.

MacDonald, L., & Richardson, A. (2011). Does academic management accounting lag practice? A cliometric study. *Accounting History, 16(4)*, 365-388.

Macintosh, N., & Scapens, R. (1990). Structuration theory in management accounting. *Accounting, Organizations and Society, 15(5)*, 455-477.

Macintosh, N., & Scapens, R. (1991). Management accounting and control systems: a structuration theory analysis. *Journal of Management Accounting Research, 3(3)*, 131-158.

Mackay, J. (1987). Key issues in manufacturing accounting. *Management accounting, January*, 32-37.

Malmi, T. (1999). Activity-based costing diffusion across organizations: an exploratory empirical analysis of Finnish firms. *Accounting, Organizations and Society, 24(8)*, 649-672.

Malmi, T., & Granlund, M. (2009). In search of management accounting theory. *European Accounting Review, 18(30*, 597-620.

Marie, A., Cheffi, W., Louis, R., & Rai, A. (2010). Is standard costing still relevant? Evidence from Dubai. *Management Accounitng Quarterly 11(2)*, 1-10.

Max, M. (2005). Beyond Budgeting: case studies in North American financial services. *Journal of Performance Management, 18(1)*, 3.

McKinnon, S., & Bruns, W. (1992). Management information and accounting information: what do managers want. *Advances in Management Accounting*, 55-80.

McLellan, J., & Moustafa, E. (2011). Management Accounting Practices in the Gulf Cooperative Countries. *International Journal for Business, Accounting and Finance, 6(1)*, 129-142.

McNair, C., & Leibfried, K. (1994). *Benchmarking : a tool for continuous improvement.* London: HarperCollins College.

McNair, C., Mosconi, W., & Norris, T. (1989). *Beyond the Bottom Line: Measuring World Class Performance.* Homewood: Dow Jones-Irwin.

Meyer, C. (2004). Diffusion of Strategic Management Accounting innovations in Denmark. *Working Paper, Copenhagen Business School*.

Mia, L., & Patiar, A. (2001). The use of management accounting systems in hotels: an exploratory study. *International Journal of Hospitality Management, 20(2)*, 111-128.

Micheli, P., & Neely, A. (2010). Performance Measurement in the Public Sector in England: Searching for the Golden Thread. *Public Administration Review, July/August*, 591-600.

Mills, P. K. (1986). *Managing Service Industries: Organisational Practices in a Postindustrial Economy.* Cambridge, MA: Ballinger Publishing Company.

Milward, R. (1990). Productivity in the UK Services Sector: Historical Trends 1856-1985 and Comparisions with the USA 1950-85. *Oxford Bulletin of Economics and Statistics, 52(4)*, 423-436.

Modarress, B., Ansari, A., & Lockwood, D. (2005). Kaizen costing for lean manufacturing: a case study. *International Journal of Production Research, 43(9)*, 1751-1760.

Modell, S. (1996). Management accounting and control in services: structural and behavioural perspectives. *International Journal of Service Industry Management, 7(2)*, 57-80.

Modell, S. (2005). Triangulation between case study and survey methods in management accounting research: An assessment of valididty implications. *Management Accounting Research, 16*, 231-254.

Modell, S. (2007). Managing accounting change. In T. Hopper, D. Northcott, & R. Scapens, *Issues in management accounting, 3rd ed.* (pp. 335-355). Harlow, Essex: Pearson Education.

Monden, Y., & Hamada, K. (1991). Target costing and kaizen costing in Japanese automobile companies. *Journal of Management Accounting Research, 3*, 16-33.

Monden, Y., & Lee, J. (1993). How a Japanese auto maker reduces costs. *Management Accounting 75(2)*, 22-26.

Moon, P., & Bates, K. (1993). Core analysis in strategic performance appraisal. *Management Accounting Research, 4(2)*, 139-152.

Morgan, G., & Smircich, L. (1980). The case for qualitative research. *Academy of Management Review, 5(4)*, 491-500.

Mouritsen, J. (1998). Driving growth: economic value added versus intellectual capital. *Management accounting research, 9(4)*, 461-482.

Murthy, D., & Blischke, W. (2000). Strategic warranty management: a life-cycle approach. *IEEE Transact. Eng. Manage., 47 (1)*, 40-54.

Nanni, a., Dixon, R., & Vollmann, T. (1992). Integrated Performance Measurement: Management Accounting to Support the New Manufacturing Realities. *Journal of Management Accounting Research 4 (1)*, 1-19.

Naor, M., Bernardes, E., & Coman, A. (2013). Theory of constraints: is it a theory and a good one? *International Journal of Production Research 51(2)*, 542-554.

Neely, A., Adams, C., & Crowe, P. (2001). The performance prism in practice. *Measuring business excellence, 5(2)*, 6-13.

Neely, A., Bourne, M., & Adams, C. (2003). Better budgeting or beyond budgeting. *Measuring Business Excellence, 7 (3)*, 22-28.

Neely, A., Gregory, M., & Platts, K. (1995). Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management, 15(4)*, 80-116.

Neilson, O. (1954). Direct costing: the case for. *The Accounting Review, 29(1)*, 89-93.

Nielsen, F., Bukh, P., & Mols, N. (2000). Barriers to customer-orientated management accounting in financial services. *International Journal of Services Management, 11(3)*, 269-286.

Noreen, E., Smith, D., & Mackey, J. (1995). *The Theory of Constraints and its Application to Management Accounitng.* New York: North River Press.

Norreklit, H., & Mitchell, F. (2007). The balanced scorecard. In T. Hopper, D. Northcott, & R. Scapens, *Issues in management accounting, 3rd Ed* (pp. 175-198). Harlow, Essex: Pearson education.

Office for National Statistics. (2011). *Index of Services July 2011.* London: Office for National Statistics.

Office, N. S. (2013). *Quarterly National Accounts Q1.* London: National Statistics office.

O'Reilly, M., & Kiyimba, N. (2015). *Advanced qualitative research: A guide to using theory.* London: Sage.

Otley, D. (2008). Did Kaplan and Johnson get it right? *Accounting, Auditing and Accountability Journal, 21(2)*, 229-239.

Otley, D., & Berry, A. (1980). Control, organsiation and accounting. *Accounting, Organizations and society, 5(2)*, 231-244.

Otley, D., & Berry, A. (1994). Case study research in management accounting and control. *Management Accounting Research, 5*, 45-65.

Parker, R. (1969). *Management Accounting, an Historical Perspective.* London: MacMillan.

Pavlatos, O., & Paggios, I. (2008). Management accounting practices in the Greek hospitality industry. *Managerial Auditing Journal, 24(1)*, 81-98.

Pears, J. S. (1952). The Costing of Governement Contracts. In D. Solomons, *Studies in Costing.* London: Sweet & Maxwell.

Pentland, B. (2011). The foundation is solid, if you know where to look: comment on Felin and Foss. *Journal of Institutional Economics, 7(02)*, 279-293.

Perera, S., Harrison, G., & Poole, M. (1997). Customer-focused manufacturing strategy and the use of operations-based non-financial performance measures: a research note. *Accounting, Organizations and Society 22*, 557-572.

Perren, L., & Grant, P. (2000). The evolution of management accounting routines in small businesses: a social construct perspective. *Management Accounting Research, 11(4)*, 391-411.

Perren, L., Partridge, M., & Berry, A. (2000). *Management Accounting in Small Growth Orientated Service Sector Businesses.* London: CIMA.

Pfeffer, J. (2007). A modest proposal: How we might change the process and product of managerial research. *Academy of Management Journal, 50(6)*, 1334-1345.

Pfeifer, P., Haskins, M., & Conroy, R. (2005). Customer lifetime value, customer profitability, and the treatment of acquisition spending. *Journal of managerial issues 17(1)*, 11-25.

Phan, T., Baird, K., & Blair, B. (2014). The use and success of activity-based management practices at different organisational life cycle stages. *International Journal of Production Research, 52(3)*, 787-803.

Pilkington, M., & Growther, D. (2007). Budgeting and Control. *Finanacial Management*, Vol 3.

Pine, B., & Gilmore, J. (1999). *The experience economy.* Boston, MA: Harvard Business School Press.

Pollard, S. (1968). *The genisis of modern Management .* London: Penguin.

Porter, L., & Rayner, P. (1992). Quality costing for total quality management. *International Journal of Production Economics, 27(1)*, 69-81.

Porter, M. (1985). *Competitive advantage: creating and sustaining superior performance.* New York: Free Press.

Puxty, T., & Lyall, D. (1990). Cost control: The manager's perspective. *Management Accounting, 68 (11)*, 46-47.

Quail, J. (1997). 'More peculiarities of the British: budgetary control in UK and US business to 1939. *Business and Economic History, 26(2)*, 617–631.

Quinn, J., & Gagnon, C. (1986). Will services follow manufacturing into decline? *Harvard Business Review*, 95-103.

Quinn, M. (2014). Stability and change in management accounting over time—A century or so of evidence from Guinness. *Management Accounting Research, 25(1)*, 76-92.

Raaij, V., Vernooij, M., & Triest, S. (2003). The Implementation of customer profitability analysis: a case study. *Industrial Marketing Manegement, 32(7)*, 573-583.

Ray, M., & Schlie, T. (1993). Activity-based management of innovation and R&D operation. *Journal of Cost Management, winter*, 16-22.

Reid, G., & Smith, J. (2000). The impact of contingencies on management accounting system development. *Management Accounting Research, 11*, 27-450.

Rickards, R. (2006). Beyond budgeting: boon or boondoggle? *Investment Management and Financial Innovations, 3(2)*, 62-76.

Rigby, D., & Bilodeau, B. (2007). Bain's global 2007 management tools and trends survey. *Strategy & Leadership, 35(5)*, 9-16.

Ritzer, G. (1993). *The McDonaldization of society.* Thousand Oaks, CA: Pine Forge Press.

Roberts, J., & Scapens, R. (1985). Accounting systems and systems of accountability—understanding accounting practices in their organisational contexts. *Accounting, Organizations and Society, 10(4)*, 443-456.

Roslender, R. (1995). Accounting for strategic positioning: responding to the crisis in management accounting. *British Journal of Management, 6*, 45-57.

Roslender, R., & Hart, S. (2003). In search of strategic management accounting: theoretical and field study perspectives. *Management Accounting Research, 14(3)*, 255-279.

Roslender, R., & Hart, S. (2006). Interfunctional cooperation in progressing accounting for brands: the case for brand management accounting. *Journal of Accounting & Organizational Change, 2(3)*, 229-247.

Roslender, R., & Hart, S. (2010). Strategic management accounting: lots in a name. *(No. 1005). Accountancy Research Group, Heriot Watt University.*

Ross, L., & Kovachev, I. (2009). *Management Accounting Tools for today and tomorrow.* London: CIMA.

Ryan, P., & Ryan, G. (2002). Capital budgeting practices of the Fortune 1000: how have things changed? *Journal of Business and Management, 8(4)*, 355-364.

Ryan, R., Scapens, R., & Theobald, M. (2007). *Research Method and Methodology in Finance and Accounting 2nd Ed.* Padstow: Thomson Learning.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for Business Students, 4th Edition.* Harlow: Pearson Education.

Scapens, R. (1983). Closing the gap between theory and practice. *Management Accounting, 61(1)*, 34-36.

Scapens, R. (1984). Management Accounting: A Survey. In R. Scapens, D. Otley, & R. Lister, *Management Accounting, Organisational Behaviour and Capital Budgeting* (pp. 15-94). London: Macmillan.

Scapens, R. (1991). *Management Accounting: A Review of Recent Developments, 2nd Edition.* London: Macmillan.

Scapens, R. (1994). Never mind the gap: towards an institutional perspective on management accounting practice. *Management accounting research, 5(3)*, 301-321.

Scapens, R. (2006a). Changing times: management accounting research and practice from a UK perspective. In A. Bhimani, *Contemporary Issues in Management Accounting* (pp. 329-354). Oxford: Oxford University Press.

Scapens, R. (2006b). Understanding Management Accounting Practices: A personal Journey. *The British Accounting review, 38*, 1-30.

Scapens, R. W., & Arnold, J. (1986). Economics and management accounting research. In M. Bromwich, & A. Hopwood, *Research and Current Issues in Mangement Accounting.* London: Pitman.

Scapens, R., & Bromwich, M. (2010). Practice, theory and paradigms. *Management Accounting Research, 21(2)*, 77-78.

Scapens, R., & Jazayeri, M. (2003). ERP systems and management accounting change: opportunities or impacts? A research note. *European accounting review, 12(1)*, 201-233.

Scapens, R., Cooper, D., & Arnold, J. (1987). *Management Accounting: British Case Studies.* London: CIMA.

Scapens, R., Turley, S., Burns, J., Lewis, L., Joseph, N., & Southworth, A. (1996). *'External Reporting and Management Decisions.* London: CIMA.

Schiffauerova, A., & Thomson, V. (2006). Managing cost of quality: insight into industry practice. *The TQM Magazine, 18(5)*, 542-550.

Schmenner, R. (1986). How can service businesses survive and prosper. *Sloan Management Review, Spring*, 21-32.

Shank, J. (1989). Strategic cost management: new wine or just new bottles? *Journal of Management Accounting Research, 1*, 47-65.

Shank, J. (2006). Strategic cost management: upsizing, downsizing, and right(?) sizing. In A. Bhimani, *Contemporary Issues in Management Accounting* (pp. 355-379). Oxford: Oxford University Press.

Shank, J., & Govindarajan, V. (1992). Strategic cost management: the value chain perspective. *Management Accounitng Research*, 177-197.

Shank, J., & Govindarajan, V. (1993). *Strategic Cost Management.* New York: Free Press.

Sharma, R. (2000). *From relevance lost to relevance regained: management practice in the new millennium.* International Federation of Accountants.

Sheridan, T. (1996). Costing in the Service Sector (parallels between costing for services companies and firms in other sectors). *Management Accounting (UK), 74(5)*, 44-46.

Shields, M. (1997). Research in management accounting by North Americans in the 1990s. *Journal of Management Accounting Research, 9*, 3-61.

Shields, M. (1998). Management accounting practices in Europe: a perspective from the States. *Management Accounting Research, 9*, 501-513.

Shields, M., & Young, S. (1991). Managing product life cycle costs: an organizational model. *Journal of Cost Management, fall*, 39-52.

Silvestro, R., Fitzgerald, L., Johnston, R., & Voss, C. (1992). Towards a Classification of Service Process. *International Journal of Service Industry Management, 3(3)*, 62-75.

Simmonds, K. (1981). Strategic management Accounting. *Management Accounting, 59(4)* , 26-30.

Simmonds, K. (1982). Strategic management accounting for pricing: a case example. *Accounting and Business Research, 12(4)*, 206-214.

Simmonds, K. (1986). The accounting assessment of competitive position. *European Journal of Accounting, 20(1)*, 16-22.

Simons, R. (1987). Accounting control systems and business strategy: an empirical analysis. *Accounting, Organizations and Society, 12(4)*, 357-374.

Sleihat, N., Al-Nimer, M., & Almahamid, S. (2012). An Exploratory Study of the Level of Sophistication of Management Accounting Practices in Jordan. *International Business Research, 5(9)*, 217-234.

Sloan, A. P. (1986). *My years at general motors.* Harmondsworth: Penguin.

Smith, M. (2002). Gaming Nonfinancial Performance Measures. *Journal of Management Accounting Research, 14*, 119-133.

Snee, R., & Hoerl, R. (2009). Turning to service sectors. *Industrial engineer, October*, 37-40.

Soete, L., & Miozzo, M. (1989). *Trade and Development in Services: A Technical Perspective.* Maastricht: Maastricht Economic Research Institute on Innovation and Technology.

Solomons, D. (1950). Uniform Cost Accounitng - a survey parts I & II. *Economica*, 237-253.

Solomons, D. (1952). The Historical Development of Costing. In D. Solomons, *Studies in Costing* (p. 17). London.

Spicer, B. (1992). The resurgence of cost and management accounting: a review of some recent developments in practice, theories and case research methods. *Management Accounting Research, 3(1)*, 1-37.

Stacey, N. H. (1954). *English Accountancy: A study in Social and Economic History 1800-1954.* London: Gee.

Staubus, G., Sorter, G., & Horngren, C. (1963). Direct, Relevant or Absorption Costing? *The Accounting Review, 38(1)*, 64-74.

Stones, R. (2001). Refusing the Realism—Structuration Divide. *European journal of social theory, 4(2)*, 177-197.

Stones, R. (2005). *Structuration theory.* Basingstoke: Palgrave Macmillan.

Stratton, W., Desroaches, D., Lawson, R., & Hatch, T. (2009). Activity based costing: is it still relevant? *Management accounting Quarterly, 10(3)*, 31-40.

Sulaiman, S., & Mitchell, F. (2005). Utilising a typology of management accounting change: An empirical analysis. *Management Accounting Research, 16(4)*, 422-437.

Sulaiman, S., Ramli, A., & Mitchell, F. (2008). What factors drive change in management accounting in Malaysian organisations? *Malaysian Accounting Review, 7 (1)*, 61-76.

Suliaman, M., Ahmed, N., & Alwi, N. (2004). Management Accounting practices in selected Asian countries. *Managerial Auditing Journal*, 493-508.

Sumkaew, N., Liu, L., & McLaren, J. (2012). Management accounting practices in Thailand. *Asia pacific Management Accounting Association Conference, in Xiamen University, China*.

Tan, L., Fowler, M., & Hawkes, L. (2004). Management accounting curricula: striking a balance between the views of educators and practitioners. *Accounting Education, 13(1)*, 51-67.

Tangen, S. (2004). Performance measurement: from philosophy to practice. *nternational Journal of Productivity and Performance Management, 53(8)*, 726-737.

Thomas, A. (1989). The effects of organisational culture on choices of accounting methods. *Accounting and Business Research, 19(76)*, 363-378.

Thomas, D. (1978). Strategy is different in service businesses. *Harvard Business Review, July-August*, 158-165.

Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: Case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research, 16(1)*, 101-129.

Tillmann, K., & Goddard, A. (2008). Strategic Management Accounting and sense-making in a multinational company. *Management Accounting Research, 19*, 80-102.

Tilly, J. (2006). Improvements to timely measures of service sector output. *National Statistics*.

Tomkins, C., & Carr, C. (1996). Editorial. *Management Accounting Research, 7(2)*, 67-81.

Tomkins, C., & Groves, R. (1983). The everyday accountant and researching his reality. *Accounting, Orgasnization and Society, 8(4)*, 361-374.

Turney, P. (2010). Activity based costing: an emerging foundation for performance. *Cost Management 24(4)*, 33-42.

Urwick, L., & Brech, E. (1948). *The Making of Scientific Management .* London.

Uyar, A. (2010). Cost and management accounting practices: a survey of manufacturing companies. *Eurasian Journal of Business and Economics, 3(6)*, 113-125.

Vaivio, J. (1999). Exploring a 'non-financial' management accounting change. *Management Accounting Research 10(4)*, 409-437.

Van der Stede, W., Young, S., & Chen, C. (2005). Assessing the quality of evidence in empirical management accounting research: The case of survey studies. *Accounting, organizations and society, 30(7)*, 655-684.

Verma, R., & Young, S. (2000). Configurations of low contact services. *Journal of Operations Management, 18*, 643-661.

Vos, A. (2010). *Service innovation: manageing innovation from service idea generation to innovastive offer.* Twente: Exser.

Waldron, M. (2007). Today's management accounitng techniques in NZ businesses. *Chartered Accountants Journal, Febuary*, 32-34.

Walliman, N. (2011). *Your research project: designing and planning your work.* London: Sage Publications.

Wanderley, C., & Cullen, J. (2012). Management Accounting Research: Mainstream versus Alternative Approaches. *Contabilidade Vista & Revista, 22(4)*, 15-44.

Ward, K., Hewson, W., & Srikanthan, S. (1992). Accounting for the Competition. *Management Accounting, 70, February*, 19-20.

Wardell, M., & Weisenfeld, L. (1991). Management Accounting and the workplace in the United States and Great Britain. *Accounting Organisations and Society, 16(7)*, 655-670.

Wardell, M., & Weisenfeld, L. (1991). Management Accounting and the Workplace in the United States and Great Britain. *Accounting, Orgasniataions and Society, 16(7)*, 655-670.

Watson, K., Blackstone, J., & Gardiner, S. (2007). The evolution of a management philosophy: The theory of constraints. *Journal of Operations Management, 25*, 387-402.

Watts, R., & Zimmermann, J. (1979). The demand for and supply of accounting theories: the market for excuses. *Accounting Review, January*, 273-305.

Wheldon, H. (1937). *Cost Accounting and Costing Methods, 4th edn.* London: MacDonald & Evans.

Wijewardena, H., & De Zoysa, A. (1999). A comparative analysis of management accounting practices in Australia and Japan: an empirical investigation. *The International Journal of Accounting, 34(1)*, 49-70.

Wilson, R. (1995). Strategic management accounting. In D. Ashton, T. Hopper, & R. Scapens, *Issues in Management Accounting Volume 2* (pp. 159-190). London: Prentice Hall.

Wisker, G. (2008). *The postgraduate research handbook: Succeed with your MA, MPhil, EdD and PhD.* Houndsmills: Palgrave Macmillan.

Woodward, J. (1965). *Industrial Organization.* Oxford: Oxford University Press.

Yalcin, S. (2012). Adoption and benefits of management accounting practices: an inter-country comparison. *Accounting in Europe, 9(1)*, 95-110.

Yazdifar, H., & Askarany, D. (2012). A comparative study of the adoption and implementation of target costing in the UK, Austrailia and New Zealand. *International Journal of Production Economics, 135(1)*, 382-392.

Yazdifar, H., & Tsamenyi, M. (2005). Management accounting change and the changing roles of management accountants: a comparative analysis between dependent and independent organizations. *Journal of Accounting & Organizational Change, 1(2)*, 180-198.

Yazdifer, H., & Askarany, D. (2010). *A comparative investigation into the diffusion of management accounting innovations in the UK, Australia and New Zealand.* London: CIMA.

Yeshmin, F., & Hossan, M. (2011). Significance of Management Accounting Techniques in Decision-making: An Empirical Study on Manufacturing Organizations in Bangladesh. *World Journal of Social Sciences, 1(1)*, 148-164.

Yin, R. (2014). *Case Study Research: Design and Methods.* Thousand Oaks, CA: Sage.

Zeithaml, V., & Bitner, M. (1996). *Service Marketing.* New York: McGraw-Hill.

Zimmerman, J. (2001). Conjectures regarding empirical managerial accounting research. *Journal of Accounting and Economics, 32(1)*, 411-427.

APPENDICIES

Appendix 1: CIMA Core Practices

TABLE 2: Core practice areas of the management accounting function

PRACTICE AREA	DEFINITION	VALUE TO THE ORGANISATION	CONTRIBUTION OF THE MANAGEMENT ACCOUNTANT TO PRACTICE AREA

Appendix 2: Empirical Survey Evidence

Author(s)	Date	Method	Details of sample	Survey covered	Key findings	Theoretical stance	response rate	Likert scale
Edwards and Emmanuel	1990	Postal survey	44 CIMA Scotland members	Variety of traditional and contemporary approaches	Compared results with articles in accounting, organizations and society. Found practitioners ranked traditional methods highly but academic opinion differed.			
Fitzgerald, Johnston, Brignall, Silvestro, Voss	1991	case study	11 large UK service businesses	performance measures	proposed a model for performance management in service			
Bright, Davies, Downes, Sweeting	1992	Postal survey	5463 UK manufacturers. 677 reply's	Variety of traditional and contemporary approaches	High use of contemporary tools. Survey results not in line with authors general observations and therefore seen as not fully reliable by future studies.			

Drury, Braund, Osborne Tayles	1993	Postal survey		Variety of traditional and contemporary approaches	Full costing widely used ABC only introduced by 10% of firms only other major development was use of more non-financial performance measures.		12	
Dugdale	1994	Postal survey	CIMA members in the Bristol branch. 137 usable responses.	Variety of traditional and contemporary approaches	relatively sophisticated tools were poorly rated and a number of traditional tools such as budgeting were highly rated. Quantitative tools poorly used.			
Innes and Mitchell	1995	Postal survey	Top 1000 companies listed in The Times in 1994. 251 usable responses.	ABC	results showed 19.5% were using ABC and a further 26% were considering its use.		27.5	5
Collier and Gregory	1995	case study	UK hotel sector 6 hotel groups.	SMA tools	more widespread adoption of SMA in particular in the field of competitor monitoring.		25	

Ghosh and Chan	1996	Postal survey	640 firms in Singapore. 109 responses.	Variety of traditional and contemporary approaches	Organisations which tend to be SME's widely use traditional methods, a slow move to accept some of the more contemporary approaches such as quality costing and ABC.			
Guilding, Lamminmaki, & Drury,	1998	Postal survey	268 manufacturing companies in New Zealand and 1269 in the UK. 61 usable replies NZ and 303 UK.	Budgeting and standard costing practices	These tools continue to be widely adopted in both countries			
Drury	1998	Postal survey	36 largest UK building societies. Usable replies from 28.	Management Accounting information systems	budgeting systems widespread along with a performance reporting system.		62	

Chenhill and Langfield-Smith	1998	Postal survey	140 Australian manufacturing firms of various size. 78 returned	Variety of traditional and contemporary approaches	Adoption levels of and benefits from traditional tools higher than contemporary ones.		78	
Wijewardena and De Zoysa	1999	Postal survey	1000 largest manufactures in Japan and Austrailia.217 and 231 usable responses respectively	Variety of traditional and contemporary approaches	Australian co.'s favour traditional tools of cost control while Japanese favour cost planning and cost reduction tools such as target costing. ABC widely used in Australia but not in Japan	contingency theory		
Nielsen, Bukh and Mols	2000	Postal survey	98 Danish Financial institutions. Response rate of 62%	customer-orientated management accounting	new systems less orientated to customers. Used ABC.		32	
Perren and Grant	2000	case study	4 small service sector firms	Management accounting routines	mainly reflects on role of owner manager. Mainly routine tools used.		22	5

Guilding, Cravens, Tayles	2000	Postal survey	217 NZ, 175 UK and 920 US largest organisations predominantly manufacturing	SMA tools	wide range of application competitor accounting and strategic pricing most commonly used. Negligible use of the term SMA.			
Sharma	2000	postal survey	1500 CPA accounting managers. 22% response rate	Variety of traditional and contemporary approaches	Traditional tools most popular. Some popularity for SMA. Need to use both for decision making.		51/38/13	7
Joshi	2001	Postal survey	246 large Indian manufacturing companies. 60 usable responses	Variety of traditional and contemporary approaches	Following the same structure as Chenhill and using the Australian study for comparison. High adoption of traditional tools and poor adoption and intent to adopt the contemporary tools.		24	7
Ahrens and Chapman	2002	Longitudinal case study.	UK restaurant chain	performance measures	diverse use of performance measures			
Hussain and Gunasekaran	2002	case study	4 Finnish Banks/Financial	Non-financial performance	Factors influencing use pf performance measures. Evidence of			

			Institutions	indicators	use of BSC			
Adler, Everett, Waldron	2002	Postal survey	1057 manufacturing companies in New Zealand.165 usable responses.	Variety of traditional and contemporary approaches	Traditional tools most popular. Some popularity for SMA. Also investigated barriers to adoption			
Jackson and Lapsley	2003	Postal survey	UK public sector accountants. 49% response rate	Variety of traditional and contemporary approaches	wide array of accounting tools in public sector. Interesting insights on accounting change.			
Sulaiman, Nik Ahmad and Alwi	2004	Postal survey	brought together research from China, Malaysia, Singapore and India	Variety of traditional and contemporary approaches	Use of contemporary tools is lacking in the four countries studies.		29	

Arena and Azzone	2005	Postal survey	289 Italian Industrial Companies. 84 usable responses	ABC/M BSC and EVA	61% of companies surveyed used these techniques. But no replacement of traditional techniques.		15	
Auzair and Langfield-Smith	2005	Postal survey	1000 service organisations in Australia. 149 usable responses	forms of management control systems	a firms Management control systems are more bureaucratic in mass service firms and organisational lifecycle and business strategies have significant influence on design.	contingency theory	14	7
Abdul-Maksoud, Dugdale and Luther	2005	Postal survey	2242 UK manufacturing firms. 313 usable responses	Non-financial performance indicators	large scale move to the use of non financial information.	contingency theory	39	7
Hyvonen	2005	Postal survey	132 Finnish manufacturing firms. 51 returned	Variety of traditional and contemporary approaches	Compared results with the Chenhill and Langfield-Smith Australian study. Traditional measures most popular findings similar between Finnish and Australian firms. Finnish firms higher on use on non-financial			

					info.			
Avolonitis and Indounas	2006	Intervie ws	26 in-depth interviews and 170 companies took part from main service sectors in Greece.	Pricing	Market driven information important emphasis on competitors current price.		49	7
Abdel-Kader and Luther	2008	Postal survey	650 food and drink companies in the UK. 122 usable results	Variety of traditional and contemporary approaches	traditional methods dominate CPA is strong. Many SMA tools at bottom of list.			
Dugdale, Jones and Green	2006	case study	41 manufacturing firms.	Variety of traditional and contemporary	Manufacturing companies choose the most straight forward methods. Marginal costing and contribution used more widely than expected.		20	7

				approaches				
Al-Omiri and Drury	2007	Postal survey	1000 manufacturing and service firms from UK.176 returned complete.	Product costing systems	a number of factors are responsible for the adoption of more sophisticated tools.			
Cugini, Caru and Zerbini	2007	case study	Tourism Village in Italy	SCM	better insight into way CPA can be conducted	contingency theory	42	
Cinquini & Tenucci	2007	Web-based Survey	328 medium sized Italian manufacturing companies. 92 usable responses	SMA tools	Significant use of SMA techniques in particular attribute costing, customer accounting, strategic pricing and competitor monitoring		56	5

Khamalah and Lingaraj	2007	Postal survey	550 small service sector businesses in Indiana USA. 306 usable responses.	Total Quality Management (TQM)	Top management commitment but lack of formal programme			
Cadez Guilding	2008	Postal survey	388 of the largest Slovenian companies from a variety of sectors excluding financial services. 193 usable responses	SMA tools	wide range of usage, 9 tools widely used out of 17. manufacturing sector also used more tools with tourism services second.		18	

Jack	2009	Intervie ws	Interviews took place with farm consultants advisors bankers and accountants whose clients covered thousands of farms in the UK, US, Australia and New Zealand.	SMA tools	tools are being adopted most widely is benchmarking, consultants instrumental in introducing BSC, TC, VCA.			
Ross and Kovachev	2009	Web-based Survey	439 respondents all sectors though 50% service mainly UK but also other areas across the world	Variety of traditional and contemporary approaches	survey firmly shows mainly traditional tools to be the most used however the tools most likely to be introduced soon comprise main of the reviewed approaches.			5

Angelakis, Theriou and Floropoulos	2010	Postal survey	157 large Greek manufacturing companies 88 returned	Variety of traditional and contemporary approaches	most beneficial practices are traditional: capital budgeting, budgeting and variance analysis. Highlighted a trend to employ more contemporary approaches		86	
Ilias, Abd Razak, and Yasoa	2010	Postal survey	67 small predominantly manufacturing Malaysian firms. 58 usable responses	Variety of traditional and contemporary approaches	Traditional techniques again ranked highest. Limited use of modern approaches.	phenomenological	20	5
Akbar	2010	Web-based Survey	100 UK and Indian companies selected at random from a range of sectors. 20 companies responded.	Variety of traditional and contemporary approaches	India as an emerging economy is lagging behind in the use of modern approaches though the service sector had most use of SMA tools in India and the manufacturing sector in the UK.		100	

Uyar	2010	Face to Face survey	61 randomly chosen Turkish companies	Variety of traditional and contemporary approaches	Traditional techniques again ranked highest. Limited use of modern approaches.		17	
Yalcin	2010	Web-based Survey	472 Turkish manufacturing companies. 80 returned	Variety of traditional and contemporary approaches	Traditional techniques again ranked highest. Limited use of modern approaches.		29/39/29	
Yazdifar and Askarany	2010	Postal survey and interviews	1,175 organisations in AU, 366 in NZ and 500 in the UK. 35% in manufacturing and 65% in service. 584 responses.	Variety of traditional and contemporary approaches	highlighted reasons for adoption and that there was growing adoption of modern approaches with benchmarking being the highest.		23	4

Joshi, Bremser, Deshmukh, Kumar	2011	Postal survey	244 Gulf organisations from variety of sectors. 57 Reponses.	Variety of traditional and contemporary approaches	In line with other studies most widely used were ABC, ABM and KC.		34	5
McLellan and Moustafa	2011	Web-based Survey	153 usable responses from GCC countries 80% firms service sector.	Variety of traditional and contemporary approaches	traditional tools including budgeting variance analysis and profit based performance measures highly adopted. ABC and BSC low adoption rates. Results showed that all MAP's including contemporary tools are used sometimes.			5
Yeshmin and Hossan	2011		74 Bangladeshi Manufacturing companies	Variety of traditional and contemporary approaches	traditional techniques ranked highest of the modern approaches BSC was most commonly used SMA tool.		33	
Sumkaew, Liu, McLaren	2012	Web-based Survey	460 Thai companies from various sectors. 109	Variety of traditional and contemporary	over 60% believe traditional MAPs to be beneficial. May contemporary MAPs not valued.			

			returned usable	approaches				
Clinton and White	2012	Web-based Survey	238 US organisations from a variety of sectors.	Variety of traditional and contemporary approaches	compared items with same survey completed in 2003. No advanced MAP's in top initiatives. Traditional tools continue to be used extensively. Use of advanced MPA's gone down.		67	5
Sleihat, Al-Nimer and Soud	2012	Postal survey	94 financial sector Jordanian companies.64 returned.	variety of traditional and contemporary approaches	Traditional tools still widespread. Likely to be adoption of more sophisticate techniques in the future.		57	
bogale	2013	Postal survey	70 Ethiopian manufacturing companies. 49 responses	Variety of traditional and contemporary approaches	usage of advanced management accounting tools is low ABC and target costing most widely used	contingency theory	79	

Farouk Abdel Al and McLellan	2013		272 Egyptian manufacturing companies. 215 responses.	Variety of traditional and contemporary approaches	this work was used for two papers the first specifically focused on strategy and its alignment with management accounting practices. The second found Management accounting practices do not differ from one industry to another, but rather from one strategy to another. Additionally it showed high adoption for traditional tools and lower adoption for many contemporary ones.		19	

Appendix 3: Services Sectoral Classification List

WORLD TRADE ORGANIZATION

RESTRICTED

MTN.GNS/W/120
10 July 1991

(98-0000)

Special Distribution

SERVICES SECTORAL CLASSIFICATION LIST

Note by the Secretariat

The secretariat indicated in its informal note containing the draft classification list (24 May 1991) that it would prepare a revised version based on comments from participants. The attached list incorporates, to the extent possible, such comments. It could, of course, be subject to further modification in the light of developments in the services negotiations and ongoing work elsewhere.

SERVICES SECTORAL CLASSIFICATION LIST

SECTORS AND SUB-SECTORS		CORRESPONDING CPC
1.	BUSINESS SERVICES	Section B
A.	Professional Services	
a.	Legal Services	
b.	Accounting, auditing and bookeeping services	862
c.	Taxation Services	863
d.	Architectural services	8671
e.	Engineering services	8672
f.	Integrated engineering services	8673
g.	Urban planning and landscape architectural services	8674
h.	Medical and dental services	9312
i.	Veterinary services	932
j.	Services provided by midwives, nurses, physiotherapists and para-medical personnel	93191
k.	Other	
B.	Computer and Related Services	
a.	Consultancy services related to the installation of computer hardware	841
b.	Software implementation services	842
c.	Data processing services	843
d.	Data base services	844
e.	Other	845+849
C.	Research and Development Services	
a.	R&D services on natural sciences	851
b.	R&D services on social sciences and humanities	852
c.	Interdisciplinary R&D services	853
D.	Real Estate Services	
a.	Involving own or leased property	821
b.	On a fee or contract basis	822
E.	Rental/Leasing Services without Operators	
a.	Relating to ships	83103
b.	Relating to aircraft	83104
c.	Relating to other transport equipment	83101+83102+
d.	Relating to other machinery and equipment	83106-83109
e.	Other	832
F.	Other Business Services	
a.	Advertising services	871
b.	Market research and public opinion polling services	864
c.	Management consulting service	865
d.	Services related to man. consulting	866

e.	Technical testing and analysis serv.	8676
f.	Services incidental to agriculture, hunting and forestry	881
g.	Services incidental to fishing	882
h.	Services incidental to mining	883+5115
i.	Services incidental to manufacturing	884+885 (except for 88442)
j.	Services incidental to energy distribution	887
k.	Placement and supply services of Personnel	872
l.	Investigation and security	873
m.	Related scientific and technical consulting services	8675
n.	Maintenance and repair of equipment (not including maritime vessels, aircraft or other transport equipment)	633+ 8861-8866
o.	Building-cleaning services	874
p.	Photographic services	875
q.	Packaging services	876
r.	Printing, publishing	88442
s.	Convention services	87909*
t.	Other	8790

2.	COMMUNICATION SERVICES	
A.	Postal services	7511
B.	Courier services	7512
C.	Telecommunication services	
a.	Voice telephone services	7521
b.	Packet-switched data transmission services	7523**
c.	Circuit-switched data transmission services	7523**
d.	Telex services	7523**
e.	Telegraph services	7522
f.	Facsimile services	7521**+7529**
g.	Private leased circuit services	7522**+7523**
h.	Electronic mail	7523**
i.	Voice mail	7523**
j.	On-line information and data base retrieval	7523**
k.	electronic data interchange (EDI)	7523**
l.	enhanced/value-added facsimile services, incl. store and forward, store and retrieve	7523**
m.	code and protocol conversion	n.a.
n.	on-line information and/or data processing (incl.transaction processing)	843**

*The (*) indicates that the service specified is a component of a more aggregated CPC item specified elsewhere in this classification list.

** The (**) indicates that the service specified constitutes only a part of the total range of activities covered by the CPC concordance (e.g. voice mail is only a component of CPC item 7523).

o.	other	
D.	Audiovisual services	
a.	Motion picture and video tape production and distribution services	9611
b.	Motion picture projection service	9612
c.	Radio and television services	9613
d.	Radio and television transmission services	7524
e.	Sound recording	n.a.
f.	Other	
E.	Other	
3.	CONSTRUCTION AND RELATED ENGINEERING SERVICES	
A.	General construction work for buildings	512
B.	General construction work for civil engineering	513
C.	Installation and assembly work	514+516
D.	Building completion and finishing work	517
E.	Other	511+515+518
4.	DISTRIBUTION SERVICES	
A.	Commission agents' services	621
B.	Wholesale trade services	622
C.	Retailing services	631+632 6111+6113+6121
D.	Franchising	8929
E.	Other	
5.	EDUCATIONAL SERVICES	
A.	Primary education services	921
B.	Secondary education services	922
C.	Higher education services	923
D.	Adult education	924
E.	Other education services	929

6.	ENVIRONMENTAL SERVICES	
A.	Sewage services	9401
B.	Refuse disposal services	9402
C.	Sanitation and similar services	9403
D.	Other	
7.	FINANCIAL SERVICES	
A.	All insurance and insurance-related services	812**
a.	Life, accident and health insurance services	8121
b.	Non-life insurance services	8129
c.	Reinsurance and retrocession	81299*
d.	Services auxiliary to insurance (including broking and agency services)	8140
B.	Banking and other financial services (excl. insurance)	
a.	Acceptance of deposits and other repayable funds from the public	81115-81119
b.	Lending of all types, incl., inter alia, consumer credit, mortgage credit, factoring and financing of commercial transaction	8113
c.	Financial leasing	8112
d.	All payment and money transmission services	81339**
e.	Guarantees and commitments	81199**
f.	Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:	
	- money market instruments (cheques, bills, certificate of deposits, etc.)	81339**
	- foreign exchange	81333
	- derivative products incl., but not limited to, futures and options	81339**
	- exchange rate and interest rate instruments, inclu. products such as swaps, forward rate agreements, etc.	81339**
	- transferable securities	81321*
	- other negotiable instruments and financial assets, incl. bullion	81339**
g.	Participation in issues of all kinds of securities, incl. under-writing and placement as agent (whether publicly or privately) and provision of service related to such issues	8132
h.	Money broking	81339**
i.	Asset management, such as cash or portfolio management, all forms of collective	8119+** 81323*

	investment management, pension fund management, custodial depository and trust services		
j.	Settlement and clearing services for financial assets, incl. securities, derivative products, and other negotiable instruments	or	81339** 81319**
k.	Advisory and other auxiliary financial services on all the activities listed in Article 1B of MTN.TNC/W/50, incl. credit reference and analysis, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring and strategy	or	8131 8133
l.	Provision and transfer of financial information, and financial data processing and related software by providers of other financial services		8131
C.	Other		
8.	HEALTH RELATED AND SOCIAL SERVICES (other than those listed under 1.A.h-j.)		
A.	Hospital services		9311
B.	Other Human Health Services		9319 (other than 93191)
C.	Social Services		933
D.	Other		
9.	TOURISM AND TRAVEL RELATED SERVICES		
A.	Hotels and restaurants (incl. catering)		641-643
B.	Travel agencies and tour operators services		7471
C.	Tourist guides services		7472
D.	Other		
10.	RECREATIONAL, CULTURAL AND SPORTING SERVICES (other than audiovisual services)		
A.	Entertainment services (including theatre, live bands and circus services)		9619
B.	News agency services		962
C.	Libraries, archives, museums and other cultural services		963

D.	Sporting and other recreational services	964
E.	Other	
11.	TRANSPORT SERVICES	
A.	Maritime Transport Services	
a.	Passenger transportation	7211
b.	Freight transportation	7212
c.	Rental of vessels with crew	7213
d.	Maintenance and repair of vessels	8868**
e.	Pushing and towing services	7214
f.	Supporting services for maritime transport	745**
B.	Internal Waterways Transport	
a.	Passenger transportation	7221
b.	Freight transportation	7222
c.	Rental of vessels with crew	7223
d.	Maintenance and repair of vessels	8868**
e.	Pushing and towing services	7224
f.	Supporting services for internal waterway transport	745**
C.	Air Transport Services	
a.	Passenger transportation	731
b.	Freight transportation	732
c.	Rental of aircraft with crew	734
d.	Maintenance and repair of aircraft	8868**
e.	Supporting services for air transport	746
D.	Space Transport	733
E.	Rail Transport Services	
a.	Passenger transportation	7111
b.	Freight transportation	7112
c.	Pushing and towing services	7113
d.	Maintenance and repair of rail transport equipment	8868**
e.	Supporting services for rail transport services	743
F.	Road Transport Services	
a.	Passenger transportation	7121+7122
b.	Freight transportation	7123
c.	Rental of commercial vehicles with operator	7124
d.	Maintenance and repair of road transport equipment	6112+8867
e.	Supporting services for road transport services	744
G.	Pipeline Transport	
a.	Transportation of fuels	7131
b.	Transportation of other goods	7139

H.	Services auxiliary to all modes of transport	
a.	Cargo-handling services	741
b.	Storage and warehouse services	742
c.	Freight transport agency services	748
d.	Other	749

I. Other Transport Services

12. OTHER SERVICES NOT INCLUDED ELSEWHERE95+97+98+99

Appendix 4: Survey Tool

Management Accounting Practices in UK service organisations

Introduction

The purpose of this survey is to examine in detail the specific management accounting techniques used in UK service industries. In particular it is hoped to explore the take up rates and usefulness of the techniques which are heralded as modern or contemporary by academics.

By participating in this survey you will be providing valuable data on the current use of management accounting techniques in service organisations. The results of the survey will be collated and disseminated back to participants. The results will provide useful benchmarks that you may use to compare your organisations use of management accounting techniques with those of other service providers. The results may also indicate that some service organisations are using techniques which you have not considered using thus far in your own organisation.

This research is being funded by a CIMA Seedcorn Research grant and will form the main primary data in the completion of my PhD. The survey can be saved part way through and takes around 15 minutes to compete.

Note that once you have clicked on the CONTINUE button at the bottom of each page you cannot return to review or amend that page

Data Protection statement

All data collected in this survey will be held anonymously and securely.

This research is carried out in accordance with the University of Gloucestershire's ethical research guidelines.

Cookies, personal data stored by your Web browser, are not used in this survey.

Section 2

Organisational Data

1 Name of Organisation

2 To which service sector does your organisation belong? Please choose one of the following options

3 What is the main business of your organisation?

4 What is the size of your organisation

5 How many employees have management accounting responsibilities?

6 Number of professionally qualified employees with management accounting responsibilities:

	enter a number in each box as appropriate
ACA	
ACCA	
AAT	
CIMA	
CIPFA	
Other (please specify)	

Management Accounting tools

This section explores the different management accounting techniques used by your organisation

7 **Costing Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using

	Re	Occasion		Nol
Activity Based Costing (ABC)				
Absorption Costing				
Environmental Costing				

Kaizen Costing				
Lifecycle Costing				
Marginal Costing (variable)				
Overhead Allocation				
Quality Costing				
Standard Costing				
Throughput Accounting				
Variance Analysis				
Costing for Jobs, Batches or Contracts				
Costing for Processes				

8 For any costing tools that you no longer or never use please give the most appropriate reason

	Not familiar with techniq ue	Not appropriat e for organisati on	Not valued by decision makers	Other	If you selected Other, please specify:
Activity Based Costing (ABC)					
Absorption Costing					

Environmental Costing					
Kaizen Costing					
Lifecycle Costing					
Marginal Costing (variable)					

Overhead Allocation					
Quality Costing					

Standard Costing					

Throughput Accounting					
Variance Analysis					
Costing for Jobs, Batches or Contracts					
Costing for Processes					

9 **Pricing Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Cost-plus pricing				
Market based pricing				
Price skimming				
Price penetration				
Segmental pricing				
Transfer pricing				

10 For any pricing tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Cost-plus pricing					
Market based pricing					
Price skimming					

Price penetration					
Segmental pricing					
Transfer pricing					

11 **Budgeting Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Activity Based budgeting				
Beyond budgeting				
Cash budgeting				
Flexible budgeting				
Incremental budgeting				
Master budgets				
Rolling forecasts				
Sales forecasts				
Zero Based budgeting				

12 For any Budgeting tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Activity Based budgeting					
Beyond budgeting					

Cash budgeting					
Flexible budgeting					
Incremental budgeting					
Master budgets					

Rolling forecasts					
Sales forecasts					
Zero Based budgeting					

13 **Profitability Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using

	Regularly	Occasionally	Never used	No longer used
Break-even analysis				
Customer profitability analysis				
Direct product profitability				
Service profitability analysis				
Relevant Costing for decisions				

14 For any Profitability tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Break-even analysis					
Customer profitability analysis					
Direct product profitability					

Service profitability analysis					
Relevant Costing for decisions					

15 **Operational Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Benchmarking				
Customer relationship management				
Decision tree/risk analysis				
Just in Time				
Learning Curves				
Linear Programming				
Total Quality Management				
Value chain Analysis				
Value Analysis				
Value Engineering				

16 For any Operational tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Benchmarking					
Customer relationship management					

Decision tree/risk analysis					
Just in Time					
Learning Curves					
Linear Programming					

Total Quality Management					
Value chain Analysis					

Value Analysis					
Value Engineering					

17

Performance Measurement Tools

Please tick all tools in

relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Free cash flow				
Economic Value Added				
Profit margins				
Return on Capital Employed				
Residual Income				

18 For any Performance Measurement tools that you no longer or never use please give the most appropriate reason

Not familiar with techniq ue	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify

Free cash flow					
Economic Value Added					
Profit margins					
Return on Capital Employed					

Residual Income					

19 **Performance Management Tools** Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Activity based Management				
Balanced scorecard				
Building blocks model				
Business Process re- engineering				
Performance pyramid				
Performance prism				
Six Sigma				
Value Based Management				

20 For any Performance Management tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Activity based Management					
Balanced scorecard					

Building blocks model					

Business Process re-engineering					
Performance pyramid					
Performance prism					
Six Sigma					
Value Based Management					

Strategic Tools Please tick all tools in relation to whether they are used regularly, occasionally, have never been used or organisation has stopped using.

	Regularly	Occasionally	Never used	No longer used
Ansoffs Matrix				
Boston Matrix				
Competitive Analysis				
Key performance indicators				
PESTLE				
Porters Generic strategies for competitive advantage				
Risk management				
Strategic Planning				
SWOT analysis				
Value chain Analysis				

22 For any Strategic tools that you no longer or never use please give the most appropriate reason

	Not familiar with technique	Not appropriate for organisation	Not valued by decision makers	Other	If you selected Other, please specify:
Ansoffs Matrix					
Boston Matrix					

Competitive Analysis					
Key performance indicators					
PESTLE					
Porters Generic strategies for competitive advantage					
Risk management					

Strategic Planning					
SWOT analysis					
Value chain Analysis					

Management Accounting and its position in the organisation

23 Please rank the following statements on a scale of 1 to 7 where 1 is strong disagreement and 7 is strong agreement.

	1 Strong Disagreement	2	3	4 Neutral	5	6	7 Strong Agreement
The management accounting function provides vital data to support the **operations** of the organisation							
The management accounting function provides vital data to support the **strategy** of the organisation							

The management accounting function is allocated adequate resources to perform satisfactorily							
The use of new management accounting techniques are initiated by the **management accounting team**							
The use of new management accounting techniques are initiated by the **managers**							
Management accounting techniques are regularly reviewed for suitability to organisational requirements							

The roles of financial and management accounting are performed by the same individuals							

24 Does your organisation use any techniques which are not mentioned in the questions above. Please give details below:

25 Finally, if you would like a copy of the finished report please put your email address below:

Survey Complete

Thank you very much for taking the time to complete this survey.

You will be sent a copy of the finished report if you have supplied an email address.

If you would like further information on the project please vist my website

www.angelalorenz.com

Key for selection options

2 - To which service sector does your organisation belong? Please choose one of the following options

Business service
Communication service
Construction and related engineering services
Distribution service Educational service
Environmental service Financial service
Health and related social service
Tourism and travel service
Recreational, cultural and sporting service
Transport service

Other service

4 - What is the size of your organisation

Micro (<10 employees) Small (>10 <50 employees) Medium (>50 <250 employees) Large (>250 <10,000 employees) Very large (>10,000 employees)

Appendix 5: Interview Structure

1. Explain the purpose of the research and confidentiality

2. Discuss the context of their organisation capturing:

   Size, structure, nature, role of the accounting function of the organisation – specifically management accounting, roles and position of management accounting.

3. Discuss the use of 'Traditional' management accounting tools explore:

   What is used, why, how – any adaptions from mainstream accepted methods.

4. Discuss the use of 'Contemporary' management accounting tools explore:

   What is used, why, how – any adaptions from mainstream accepted methods.

5. Discuss what changes they have seen in the role of management accounting in the organisation.

   What changes have taken place?

   What innovations have not been adopted?

   Reasons for lack of adoption

6. Discuss their perception of the theory practice gap in relation to services

   Consider their educational background

   Professional background

   Training requirements

7. Concluding comments.

Appendix 5: Transcript of Interview with CC5

Those are a copy of the key aims of my work and the objectives I want to fulfil. In terms of the structure I would like to consider the organisation where management accounting fits in the orgn and the scope of management accounting and then explore the different answers to the questionnaire the traditional and contemporary tools how you have used the tools and the role of management accounting and change in management accountants.

Tell me about how management accounting is organised – total in finance 16 people small management accounting team one management accountant CIMA just completing with assistant who is AAT trainee, head CFO is chartered accountant. Work as a decentralised business produce management accounts and the roll up to the management accounts and the shops produce their own p&Ls we produce the pl as long as they hit their trading contribution for the year they are then able to decide what they spend their money on costs as they want through their budget. MA is responsible for the budgeting and producing the management accounts and also producing the budget once per year no rolling forecast but a 3 year plan she also does the bs accounting each month think it is my FA background that means we do a full consolidation each month to make year-end easier period end work on a 445 basis exactly as we would on year end

40 permanent shops each is run as a profit centre and the head office departments are cost centres. Rolled up in different ways, group them together in different ways in order to produce different reports and work in a 2 week cycle to get final reports out to allow 2-3 weeks to get final decisions made for the next period.

Traditional tools used:

Budgeting: traditional incremental based on last year give a target and work bottom up CEO/CFO work on a plan for the overall business based on 3 year plan and then give a target divisions and then shop targets for trading contribution with some growth in sales and they can control costs we would give them guidelines based on last year and our expectations and guidelines on what should be expected and those are evaluated for realism there is flexibility and then are rolled up to the full plans. It is all very traditional the reason being our shop managers are not accountants and they need to understand this though basic spreadsheets but we don't feel we could ask them to do anything more complex some would take to it well but it would pull them off the shop floor for longer and that would not help with our customer facing business and because we don't do the work ourselves if we wanted to introduce anything new we would need to extensively retrain the managers. Getting peoples buy in to finance as a dark art!! They would worry about losing control the next thing to think about is using rolling forecasts that is where I would like to move to but its baby steps really.

Have you ever thought about going more contemporary with the budgets such as beyond budgeting? – it would be lovely but there are different levels of skills would need a management accountant in every shop or group of shops and we don't have the resource and time and what it would cost. Tried to do recruitment but salaries are expensive at that level for people with no experience and the job would involve more than just accounting they would need to have people skills. Not the reality in a service industry.

Turning to Standard costing can you tell me how that tool is applied? - standards per shop or publisher using cost plus or standard costing with some value added to standard cost where we say add a label or jackets. We are tied by the publisher and their retail prices. We then have to negotiate a discount with them. There are set discounts we have to offer to universities which is very competitive and this means that factors are out of our control and we get squeezed in the middle.

Variance analyisis? Compared to budget and forecasts looking at gap analysis sales mix and price discount age mark down very detailed. managers are so

close to what they are doing so on a week by week basis the variance analysis can be analysed and corrective action taken straight away. We put in a new finance software system last year which has enabled us to react quicker. The system churns out the data and the MA analyses it to see the what and the how why.

Sticking to the traditional approach works for us even if we trial something we tend to revert back to the traditional. What we do works and everybody understands it In the past finance has not been trusted going back 5 -10 years finance was centralised and out of their hands and they didn't really understand what was going on – they understand it now and we have their trust to change systems would break the trust and take away the customer facing approach.

Disperate service

Customer focused

Decentralised organisation

Change is more difficult

Even if we could change things centrally there would be the trust issue

Things are always on the to do list but never really come to fruition.

Some blank page methods are used what can be adapted but still using a traditional approach.

Could you change what you do with new shops yes but there is still that trust issue.

At the operational end (decentralised) it is more traditional and at the more centralised end where there is a more strategic influence there is greater development of contemporary tools.

Performance measurement and KPI benchmarking – CFO deals with that and the MS deals with the operational areas and the shops. Even though the MA is completing her qualification there is little upward pressure to suggest new ideas and change they are not driving change she is being taught in a traditional way.

She is keen to progress and ambitious but does not seem familiar with some of the techniques in your survey and is not bringing contemporary ideas to my attention.

Types of people who become accountants they compartmentalise and are less intuitive – if its working its ok resistant to change the status quo is easier. Training course foster new ideas. Technical knowledge is well dealt with in CPD very little industry specific CPD use retail forum but not linked to MA techniques need good examples people don't want to be first they don't want to be different.

Case studies can help if I can make change alongside what im doing people are nervous about what they give to the higher executives.

CPA/DPP – this is the issue with operational and strategic some things we can see on a case by case basis but also have the wider picture need the ability to link together not pulled out more about what actually happened market changes and envromentment changes quite a lot.

BSC – KPI became a scorecard ratios 2 years using the latest platforms for sales such as digital and online. Competitors not always the same but get industry data. Benchmarking is difficult but getting easier. – bespoke business

Average baskets done weekly

Scorecard balanced ?? financial orientated but started to implement values and behaviours and CPM tool so can access the data – moving forward putting in tools which drive the production of comptempry data. Dashboards for new ebooks gradually more towards this use of data.

Sparked decisions to get software – strategy is the instigator need to compete with larger internet providers and our unique position means we can ustilse the data we have access to better they don't have the same data. Had cash availability to make the investment.

Got to change to the market environment quicker previously FD report would have been 38 papers long now it is down to 10 but the data is more specific.

In discussion I realise we are doing more contemporary things than I thought!!

Can you tell me more about the use of the new systems? Easier way to get the data than employing more people.

What else have you been able to do with the software? I think we do a little bit of that but not embrace a whole tool ABC is used adhoc for example we found out last week the cost of using cheques and fed this to the shops who were then all on a mission to gather bank details and also one of the accountants was working on cost to send books back to publishers when she told the manager about this she used the formal tones and you could see him glaze over but if she had presented it from the perspective of how much it cost rather than the label he would have been engaged. but it sometimes is the way we use the labels that mean the managers don't engage with it. Labels frighten people away. You need to have as many of those things in your toolbox which you can pull out and use – I think that some of the things in my toolbox are dusty!! Been there quite a long time it would not hurt to have a few new things in there too.

But because of the time and resources and the training at professional level not available and there are so many of them its difficult to know what to use.

Time and resource upset the apple cart.

Education gap? Bridge into practice theoretical and not applicable case studies on wider sector would help to link education and practice.

As an employer, professional bodies such as CIMA are not asking us to contribute and don't give us more info on the courses. Syllabus changes so regularly it is difficult to know what is going on. AAT students understand why they are doing it and this has got worse in management accounting professional

education emphasis is on the technical side. If we knew what students were studying we could change what work people do to link with the syllabus.

Time and resource

CPD x amount technical and non-technical to encourage people to do more than technical and people stuff. Gap but not lack of will who goes to the events senior managers may not devolve down strategy relevant details

Better ways of disseminating such as podcasts which would be timesaving and save resources.

End

Appendix 6: Analysis of case studies using themes of strong structuration theory

Element of model	Case Company 1	Case Company 2	Case Company 3
External Structures			
In Situ			
Barriers	The car manufacturer highly influenced how the group was run. Contemporary tools – never use these tools in this organisation you cannot not influence the dealership running slightly because the way of working was controlled and dictated by VG you could not even run your own promotions or offer a finance deal without them. There was never scope to change. No contemporary tools at all. finding out how to implement it long term planning time where does it fit in with the normal work you do. If you do want to make a change it will result in the retraining of over 100 people.	It would be great to have the time to calculate a breakeven on a product but there just isn't enough time to do even these tasks that others might consider routine. Restricted by the amount of time available per week. The time available was only sufficient to complete the routine tasks. The strategic direction of the business has tended to be short term focused dominated by the MD with an emphasis on who the customer is and what the customer wants. I provide key data on costs and prices in order to steer strategy however it has not been a priority to utilise management accounting information at a strategic level because it would be a long-term term investment.	My manager [when I was a new accountant in the team] was very up to date, but had little resources to allow himself or us to go on training courses. If my manager sent me on a course I knew it was important enough to change what we were doing. as a new accountant in a business you are willing to learn but are constrained by the confines of the role and what you are told to do. There is little emphasis to change unless told to from above. the matrix structure of the organisation caused problems some accountants worked on business lines and others on countries or legal entities there is sometimes a miss match of information. A great deal od the strategy and information in relation to budgets and pricing was devolved down from the parent company. the organisation structure even in this one subsidiary makes it difficult to communicate with others or to know who has the answer you are looking for. One of my managers worked a 60 hour week he tried to listen but he was brow beaten. time and money are the two biggest barriers to change. the parent subsidiary relationship means you just do what you are told.
Enablers	Introducing our own measures gave a bigger input into performance management. And this was better for the business. The monthly management meetings enabled us to influence operational plans	The new financial software that was introduced allowed for easier and quicker ways to interrogate the system for data. This software had the effect of changing the stock control system and allowed the introduction of CPA. Customer complaints and poor quality control whilst problems actually allowed changes to be made and new systems and performance measures put in place.	My manager [when I was a new accountant in the team] was very up to date, but had little resources to allow himself or us to go on training courses. If my manager sent me on a course I knew it was important enough to change what we were doing problems experienced by the treasury department gave me the opportunity to introduce cash budgeting. My manager was receptive to new ideas and kept themselves up to date. If a manager has an open outlook it is the key to introducing new ideas. the use of cross- organisational teams allowed better communication and enhanced the ability to utilise new ideas.

General			
Barriers	– slow change to new tools the CIMA qual tools taught was not put in to place any organisations. Gap CPD for specific sectors . Qualification linked to manufacturing workshops are orientated towards manufacturing nothing focusing on service. Technical updates are the main cpd events and are not appropriate. profit margins time resources economic conditions are such that the courses are not good VFM no insight into how they can help me in my roles. Current economic conditions make it difficult to justify the time and money to go on any new training courses. Current economic conditions force you to stick to current practices and use the same software and tools.	More tools are taught but they don't influence practice. Terminology is a problem we may do something but not because we actively choose to use a new tool. It's about adapting and seeing what fits regardless of what it's called.	The way in which overheads were allocated was dependent on the ability to conform to tax rules and regulations in relation to transfer pricing. There was a very financial and statutory approach.
Enablers	Industry finance group some sessions run by accountants and they are more appropriate.	The innovations came from others not from considering the latest management accounting tools. Good cross body CPD can allow people to learn a variety of new skills. Accounting skills should be transferable	My manager was receptive to new ideas and kept themselves up to date. If a manager has an open outlook it is the key to introducing new ideas.
Internal Structures			

General Dispositions	Even at the senior management level where you are conducting strategic planning you don't seem to use your management accounting knowledge. You consider the effect your actions have on others in the organisation. You do not want to rock the boat.	The innovations came from others not from considering the latest management accounting tools. many changes put in place have been reactive to firefight problems not to improve or aim for best practice. There was a lack of consistency in message from above as to what were the priorities to focus on. You rely on the expertise of others to tell you how the system works and what to do. I could only evoke change where there was open mindedness on the part of others and good communication flow. Strategy was driven by the MD I was not able to influence this. you have to learn what the business does.	you rely on the experience of others already in the organisation to tell you how it works. X sits 200 yards from me but will send me a personal message asking a question, the answer to which may well be a yes or no, but by not getting up and communicating with others in the department and related departments there is no real understanding of why the answer may have been yes. New staff seem to miss the contexts within which they are working as a result" When you can clearly communicate how you can help with a problem people are more receptive to what you want to do as in the case of the cash system. I had a break from the organisation on my return (10 years later) I found a system I had put in place was still being done in the same way. the annual budget is king "all hail the annual budget" the use of cross- organisational teams allowed better communication and enhanced the ability to utilise new ideas.

Conjunctural Dispositions	All the tools are being used in their traditional form no changes and very routine. There has been no real change in the way these tools are used in the time that I have worked for the organisation. You do the budget you monitor variances and evaluate performance there is no impetus to change the MA comes back to budgets and forecasts. Orientated towards the financial outcomes. Role of MA – little change in the role of the management accountant except for the dealership management team with the team meetings. You have to show That there is a significant financial outcome to make a change. There seems little point in veering away from the systems they have in place running two different systems would not be cost effective and would be confusing for the dealership teams	We often don't have time to consider overheads, sometimes the price does not even cover the cost to us from the distributor, if the price covers some overheads then we are lucky. management accounting data is not regularly used to make decisions in relation to pricing. I have been given free rein to improve the financial controls and the cash management however I have not been given the time and resources I feel are necessary to improve the systems further. you learn the basics but when you get into a company you learn from the people around you. This is particularly true of a service setting, you have to learn what the business does and you adapt to that and build on your basic skills. I actively research and read journals and magazines but I was not familiar with all of the tools in the questionnaire list. I spent a lot of time reading up about new ways to budget and approaches to KPIs in my own time but was not allowed time to develop tools. You rely on your training in the basics of accounting and the systems that are already in place. management consultants come in and tell senior people in the organisation what they should do but you need to sell that to the accountants. some tools are bread and butter you have to work up to fancier tools. accountants are open-minded and know there are other tools out there. If you have an accountant who doesn't like change working for a manager that doesn't like change wont happen.	My manager [when I was a new accountant in the team] was very up to date, but had little resources to allow himself or us to go on training courses. If my manager sent me on a course I knew it was important enough to change what we were doing" when you start out straight from practice you are trained but you learn what to do in your tasks from the manager and how it has been done before. you are constrained by what you are told to do . There is little emphasis to change unless told to do so from above.
Agents Practice	KPIs came from VG information pack but this changed we then introduced our own measures linked to sales of cars servicing repairs part sales considering the correlation between the turnover on services and how many parts sold. There was an expectation that parts income would be generated by services etc. on a monthly meeting to discuss the review of figures. The use of the dealership meetings give chance to communicate with each other and put in place internal KPI's	The business has mainly been run on the basis of identifying what money has to be paid out – if I have to pay a distributor by Friday the emphasis is on what products can be promoted and sold in order to meet that payment. if we do something it is by accident not because we actively choose to look for and use a tool. Traditional tools pervaded. Was able to have bigger contribution to decision making by providing data from the new financial system. Given free rein to improve financial controls but not change systems or add now tools.	as a new accountant in a business you are willing to learn but are constrained by the confines of the role and what you are told to do. There is little emphasis to change unless told to from above. You use the traditional tools budgets variances, traditional performance measures. A number of tools are adapted you could not do overhand absorption in a traditional way due to the nature of the trunk lines running across countries and variances were based on budgets and not standards.

Outcomes	Bigger input into performance management and this was better for the business. Variance analysis was the main tool which drove action actual against budget. . Budgets are produced overheads allocated the sales managers produced the pricing but they have to check that a profit would be made. These tools are the standard and routine tasks month to month. Role of MA – little change in the role of the management accountant except for the dealership management.	new software gave a better stock management system which allowed warehouse staff to be efficient and reduce customer complaints. The KPIs put in place on distribution channels meant that we on longer slipped down the rankings and maintained our position. The software allowed better discounts to be given to customers and the CRM and CPA systems allowed wholesalers to be ranked and gave the ability to compete on price with competitors.	cost allocation is a very time consuming and tricky job given the complex nature of the business. I have seen a team of 5-10 accountants working on that regularly "the use of cross-organisational teams allowed better communication and enhanced the ability to utilise new ideas including ABM and Environmental costing.

Element of model	Case Company 4	Case Company 5
External Structures		
In Situ		
Barriers		The shop managers are not accountants and they need to understand [budgeting] through the basic spreadsheet. We don't feel we can ask them to do anything more complex. It would take them off the shop floor and that does not help with a customer facing business. If we make a change it is a choice between doing the work ourselves or extensively retraining the managers. people don't want to be the first to try something new, they don't want to be different. the cost of putting a management accountant in every shop would be very restrictive and they don't necessarily have the people skills. the main factors inhibiting change in this organisation are the fact that it is a decentralised organisation with non-accountants responsible for the finance in the shops plus the need to be a customer focused organisation and the lack of trust from the shops if we change anything. not enough time or resources to try something new. don't want to be different or the first to try something. don't want to upset the applecart.
Enablers	The use of new computer systems opened up the range of data for reporting. The change in the reporting structure to regions has given more responsibility and better ability to interact with others. Changes in personnel bring new approaches and ideas.	yes there is a gap but not the lack of a will to try something new. The new finance system has enabled us to react quicker and use a greater variety of information.
General		

Barriers	there has been a great deal of interest in Japanese techniques as new developments but they are related to manufacturing. The [CIMA] qualification could be changed in Europe to better reflect the service orientated markets that now dominate. Could not see how the qualification related to the leisure industry. Textbooks are all linked to manufacturing. I have made limited use of my qualification it is all based on the organisation and how it works and what is already being done.	There are so many [contemporary tools] it's difficult to know what to use. Syllabi change so regularly it's difficult to know what's going on and being taught. In the current economic climate people don't want to be the first to try something new, they don't want to be different. constrained by suppliers and customers in terms of discounts offered and revenue made we are squeezed in the middle. There needs to be a better bridge between education and practice. I can't justify the cost of going on a CPD course even for one day especially if it will not yield any value.
Enablers	over time there has been change in the way each events location thinks about and budgets for its income. The sources of revenue are expanding over time as we aim to weather economic conditions. Whilst changes have not been dynamic and we cannot say we have widely introduced new tools we have adapted to the changing leisure market with what we have done. case studies based on service organisations would be an excellent CPD idea.	case studies are useful, people need good examples. CPD needs to be linked to industries. Need to compete with large internet providers. The market and business environment change a lot. Our unique position and access to information enable us to take advantage and change quicker than competitors.
Internal Structures		

General Dispositions	Better communication in organisation as a result of changing structure. Everyone takes an interest in the budgets and financial data.	The shop managers are not accountants and they need to understand [budgeting] through the basic spreadsheet. We don't feel we can ask them to do anything more complex. It would take them off the shop floor and that does not help with a customer facing business. If we make a change it is a choice between doing the work ourselves or extensively retraining the managers. would like to implement a system of rolling forecasts but this has to be managed carefully and change needs to happen with "baby steps. They [shop managers] did not really understand what was going on – they understand it now and we have their trust. To change systems may break that trust. not wanting to upset the apple-cart. The managers understand the systems as they are they have freedom to make their own cost savings and target income within parameters. labels frighten people and some see finance as a dark art! good and timely communication engages managers in looking at and correcting variances. people are nervous about what they say to senior executives about new ideas. senior managers may go to events but not devolve down relevant details.
Conjunctural Dispositions	over time there has been change in the way each events location thinks about and budgets for its income. The sources of revenue are expanding over time as we aim to weather economic conditions	X used formal tones and the ABC label to explain to the manager what they were doing. You could see the managers eyes glaze over. If the information had been presented in a different way it would have engaged the manager." "labels frighten people and some see finance as a dark art!!"if it's working it is OK, the status quo is easier. yes there is a gap but not the lack of a will to try something new. Management accountants straight from training do not have the people skills required to put them in individual shops. salaries of newly qualified accountants hare high in comparison to their experience and lack of people skills. this does not work in a service environment. little upward pressure from lower level staff to suggest new ideas. the types of people who become accountants compartmentalise and are less intuitive. If something is working why change it. there is a gap between accounting education and what happens in practice but there is not a lack of will to embrace new ideas.

Agents Practice	Whilst changes have not been dynamic and we cannot say we have widely introduced new tools we have adapted to the changing leisure market with what we have done. In respect to traditional tools it is very much routine reporting. New structure has made it easier to communicate and be innovative especially with regard to income.	in the conducting of this interview I can see that we do more contemporary things than I thought. There are so many [contemporary tools] it's difficult to know what to use. not wanting to upset the apple-cart. Labels frighten people you have to consider how to discuss financial terms. good communication from head office to the shops and timely information ensures engagement with routine tasks. the use of the new financial software has made tasks easier and greater variety of data. the size of reports has changed the CFO report is only about 10 pages long now whereas before it would have been over 30. the data is more specific.
Outcomes	over time there has been change in the way each events location thinks about and budgets for its income. The sources of revenue are expanding over time as we aim to weather economic conditions. Whilst changes have not been dynamic and we cannot say we have widely introduced new tools we have adapted to the changing leisure market with what we have done	in the conducting of this interview I can see that we do more contemporary things than I thought. if it's working it is OK, the status quo is easier. Operational work tends to ne more traditional. In HO where there is more of a strategic influence there is greater development of contemporary tools. the new finance software gives us the opportunity to use tools on a case by case basis. such as ABC and CPA. the new finance system makes it easier to gather data than employing more people.