FACTORS THAT AFFECT THE ADOPTION OF THE BALANCED SCORECARD AND ITS IMPLEMENTATION PROCESS IN AUSTRALIAN HEALTHCARE ORGANISATIONS

A Thesis submitted by

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ABSTRACT

The aim of the research was to further our understanding of the adoption and implementation of the balanced scorecard (BSC) in the Australian Healthcare sector. It looks specifically at four different objectives related to the adoption, implementation and use of a BSC. Firstly, it examined the organisational, technological, and environmental factors that affected both the adoption and the perceived relative advantage of the BSC using a contingency theory approach. Secondly, it examined the characteristics/culture of the healthcare organisations that have impacted on the adoption or implementation of the BSC. Thirdly, it examined the implementation processes the organisations used to try and successfully embed the BSC into their organisations and the barriers to the implementation of the BSC. Fourthly, it outlines a comparative case study analysis, highlighting the differences between the adoption factors and the implementation process leading to different roles and outcomes for the organisations.

This thesis presents two models, that the findings supported. The first model identified factors affecting BSC adoption and implementation chosen from the BSC, the Activity-Based Costing and the Information Systems adoption literatures. The following factors were identified as affecting BSC adoption: top management support, existence of an internal champion, engagement of consultants, organisational size, compatibility of culture, organisational complexity, Information Technology quality, Information Technology compatibility/usability, quality management framework and perceived relative advantage.

The second model examined the critical success factors (CSF) that impacted the implementation of the BSC. The factors were: corporate strategy relationship, measurement vs management, accountability/assigning KPI ownership, quadrant balance & evolution, data quality & information flows, Healthcare performance/regulation, management competences, organisational learning and cultural acceptance. This research identified two additional factors: management of stakeholders (internal & external) and management of barriers as critical, and that best outcomes were achieved when the models are used within a change process project.

A contingency framework was established to show the relationship between the two models and the impact that organisational characteristics/culture has on BSC adoption/Implementation and the outcomes achieved. By clearly identifying the factors that influence the adoption of the BSC and the CSF for implementation, the study can inform practitioners, about what organisational, technological, environmental and cultural factors could impact BSC implementation within their organisations. And how best to manage the whole change process that is necessary for successful implementation and outcomes.

The rigour of this research was maintained by triangulation of the theories and literature. An initial qualitative approach comprising both formal and informal interviews was conducted to test the reliability of the models, followed by case studies to support the findings.

CERTIFICATION OF THESIS

This thesis is entirely the work of Sharelle Denise Simmons and contains no material previously published or written by another person except where acknowledgement is made.

The work contained in this thesis is original and has not been previously submitted to meet requirements for any other award at this or any other education institution.

Principal Supervisor: Professor Marie Kavanagh

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Student and Supervisors signatures of endorsement are held at the University.

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TABLE OF CONTENTS

LIST OF DIAGRAMS

LIST OF TABLES

ABBREVIATIONS

ABC	Activity Based Costing
ABM	Activity Based Management
BSC	Balanced Scorecard
CSF	Critical Success Factor
DM	District Manager
HR	Human Resource
IT	Information Technology
KPI	Key Performance Indicator
MCS	Management Control System
NHS	National Health Service
OECD	Organisation for Economic Cooperation & Development
PDP	Performance Development Plan
PMS	Performance Measurement System
QMF	Quality Management Framework
RBV	Resource Based View
SBU	Strategic Business Unit
SWOT	Strengths, Weaknesses, Opportunities, Threats
TQM	Total Quality Management
UK	United Kingdom
US	United States of America

CHAPTER 1 - INTRODUCTION

This thesis describes and outlines research about the organisational, technological and environmental factors that affect the adoption of a Balanced Scorecard (BSC) and the critical success factors for successful implementation of BSC in Healthcare organisations. This chapter outlines the motivation for the research, the objectives of the research, and the expected contributions of the research. It also contains a brief background to the research, including a description of the BSC, followed by an outline of how this thesis has been organised.

1.1 Motivation

The motivation for choosing multi-dimensional performance systems like the BSC, was derived from the fact that they are evolving into very important innovations in the management accounting field. Iselin et al. (2004) noted that "performance reporting is vitally important in contemporary organisations." (p. 3). Ittner and Larcker (1998) argued that the choice of performance indicators is one of the most critical challenges facing organisations. The motivation for specifically looking at healthcare, is because Performance Measurement is currently mandated in the public healthcare sector with performance measures and targets prescribed in the public sector budget papers. Also, Hoque (2014) and Salterio (2012) both call for more BSC research in the public sector given its varied social and political contexts. Hoque (2014) also states that much of the work on usage of the BSC is descriptive, with very little theory building on adoption and usage. This provided the researcher with strong motivation and reasons for the research in this thesis.

Atkinson et al. (1997) provided the initial motivation when he argued that 'the BSC is one of the most significant developments in management accounting' and that it is 'deserving of intense research attention.' (p. 94) Iselin et al. (2004) noted "there is still much we do not know about the extent to which BSC … affect(s) performance, and about how this relationship is affected by other organisational and environmental variables." (Iselin et al., 2004, p. 3). This call for further research in this area was reiterated by Hoque (2014). The Accounting literature has also suggested that we learn more about Management Control Systems (MCS) (e.g. the BSC) themselves.

> "Studying the role of novel MCS practices within contemporary settings is necessary to ensure that the MCS research is relevant. There is a pressing need for studies in situations in which contemporary MCS may be best suited." (Chenhall, 2003, p. 130).

The healthcare sector was chosen, as managers at health care organisations often face unique and complex management challenges because of competitive markets, changing delivery of services, aging of the population, shortage of workforce and rapidly evolving conditions. Healthcare organisations are also traditionally financially focused and driven by divisional aims and demands rather than strategy. This has particularly come to light recently in the healthcare systems in several states of Australia and Internationally. Performance measurement and management in healthcare is the focus of a number of reviews and recommendations across the globe, in both developed and developing countries. (Bobe et al., 2017; Dimitropoulos, 2017; Zastempowski, 2015; Spekle et al., 2013; Rodgers, 2011; Timoshenko & Adhikari, 2009; Knutsson et al., 2008; Mucciarone & Neilson, 2008; Landrum & Baker, 2004)

The literature suggests that using a BSC for performance measurement can bring a strategic orientation to health care organisations, which face special institutional demands (Stewart & Bestor 2000). The power of the balanced scorecard to assist healthcare organisations derives from its ability to present a succinct yet multifaceted picture of an organisation to top management and a board of directors.

Healthcare organisations are also faced with some unique challenges, different from private manufacturing organisations, where numerous studies have focused their attention (Bobe et al., 2017; Dimitropoulos, 2017; Zastempowski, 2015; Spekle et al., 2013; Rodgers, 2011; Radnor & Lovell, 2003a, 2003b; Zelman et al., 2003; Chow-Chua &Goh, 2002; Inamdar & Kaplan, 2002). They have multiple stakeholders to answer to; funding is competitive and uncertain; and because of the nature of the services provided, there is a great demand for more qualitative type measures to know how they are performing. Given that the healthcare sector itself is adopting techniques such as the BSC, it is timely that the factors that affect its adoption and the process of implementation coupled with the roles that the BSC performs be examined.

The motivation for the chosen research focus also derives from a number of the early BSC studies which were either relatively uncritical descriptions or individual case studies (Szabo & Sidor, 2014; Papalexandris et al., 2004; Chang et al., 2002) of BSC adoptions, or they were normative commentaries that outlined the ‘steps’, and ‘processes’ that should be followed to

successfully implement a BSC.[1] Few of these studies tried to examine the factors they raised in a systematic way.

In Rodgers' (2011) paper he noted the merits of further research highlighting the current challenges to the Healthcare sector resulting from proposed political direction, and how this may affect the organisational critical success factors for BSC implementation systems.

Zizlavsky (2014) noted that numerous publications discuss its potential advantages and recommend its implementation. But on the other hand, there exist huge limitations for small and medium-sized enterprises, such as time, organization and money. Any benefits resulting from successful BSC implementation must overweigh the costs of designing, implementing, and using it. He also calls for more large-scale studies in the area of innovative performance measurement systems implementation in different business sectors and areas.

1.2 Background to the study

Over two decades, the BSC has emerged as a significant new management accounting innovation (Kaplan & Norton, 1992, 1993, 1996a, 1996b, 1996c, 2001a, 2001b, 2001c, 2006, 2010, 2016; Chan & Seaman, 2008; Farneti & Guthrie, 2008; Phillips, 2004; Dobrzeniecki & Barkdoll, 2004; Kubiak, 2003; McAdam & Walker, 2003; Malina & Selto, 2001; Lipe & Salterio, 2000; Kloot & Martin, 2000; Barkdoll, 2000; Epstein & Manzoni, 1997), and yet it took quite some time to become the subject of systematic research. Many claims have been made about how it is the 'latest required' management accounting technique.

> "The professional and academic strategy literatures claim that many organisations have found traditional performance measures (e.g., *ex post* costs, profits, and return on investment) to be insufficient guides for decision making in today's rapidly changing, hyper-competitive environment." (Malina et al., 2001, pp. 47-48).

Hence, there is an enormous interest in alternative systems to better guide decision-making and performance evaluation and the BSC is claimed as a 'superior' technique to accomplish these functions.

The BSC is used to 'translate an organization's mission and strategy into a comprehensive set of performance measures that provide the framework for implementing its strategy.' (Kaplan

[1] For example, Parmenter (2002) identifies a 10-point plan. Roest (1997) refers to 10 golden rules. Kaplan & Norton, 1992, 1993, 1996; Niven, 2002; Olve et al, 1999 also contain advice about how to implement a BSC.

& Norton, 1996a, p.2). It measures an organisation's performance from four key perspectives: financial, customer, internal business processes and learning and growth. The organisation's strategy influences the measures chosen in each of these perspectives. The term "balanced" is used to emphasis the fact that organisations should include in their scorecard financial and non-financial measures, with lead and lag measures and a mix of objective and subjective measures. In the current environment, an effective strategic management control system is essential for the maintenance of competitive advantage and long-term organisational survival. Therefore, the identification and adoption of an appropriate management control system tailored to a particular organisation's needs is a key decision. The decision to adopt a BSC is a critical and costly one. Hence a firm needs to identify their reasons/motives for considering the adoption of a BSC. Possible reasons include, increasing revenue, improving long-term viability, more effective interaction between decisions and outcomes, improved communication, and stronger links to strategy. As already noted, the relative importance of these factors was appraised in this research.

One of the difficulties of choosing the BSC as the unit of analysis is, that it is not clear how balanced scorecards should be operationally defined (Chenhall, 2003). It seems likely that the nature and implementation of BSCs vary widely between organizations, with organisations using different perspectives and compositions from that promoted by Kaplan and Norton and other contributors to the BSC literature. Hence, there is a need to develop a valid measure of balanced scorecard's existence that could then be used by researchers interested in studying the BSC composition and application. Because of the dynamic nature of MCSs, the development of valid concepts and measures of MCS need to recognize the need for modification as the MCS evolves. It is in light of this that a particular facet of interest in the research concerns healthcare organisational differences and their impact on the adoption and composition of the BSC.

An underlying premise of the research is that the BSC represents an innovation for the entity adopting it. The BSC is seen as an, 'administrative' innovation rather than a technical innovation (Swanson, 1994). Therefore, innovation diffusion theory (IDT) predicts that relative advantage, image, compatibility, complexity, visibility, result demonstrability, and trialability affect the adoption of a (technical) innovation (Moore and Benbasat, 1996). This research appraised the extent to which these factors also pertain to an 'administrative' innovation like the BSC, and what additional factors might influence the BSC adoption.

The most important of these innovation characteristics is 'relative advantage' (Tornatzky and Klein, 1982). Rogers, (1995) described relative advantage as 'the degree to which an innovation is perceived as being better that the idea it supersedes' (p.212). Therefore, the model predicts that a healthcare organisation will adopt a BSC if it perceives that a BSC will 'provide greater organizational benefits than other innovations or the status quo' (Kwon and Zmud, 1987, p.237). That is, the BSC is perceived as providing greater relative advantage than the system already in place or other alternate systems. Hence the BSC needs to be perceived as providing the benefits suggested earlier.

This research proposes that there is a pre-condition that will impact on the degree of adoption of the BSC. Because an elaborate BSC system will typically be very information demanding, this research explored the idea that the level of information gathering technology already available within an organisation will impact on the degree of adoption of a BSC. Further, the innovation characteristics should not be viewed as acting on their own, but that interrelationships between these characteristics exist (Castner, 2003).

1.3 Objectives of the Research

The over-riding aim of the research was to further our understanding of the adoption of BSC in the healthcare sector. It pursued four specific objectives relating to BSC adoption and BSC process of implementation and examined:

1) the impact of several organisational, technological and environmental factors on the adoption of the BSC and on the perceived relative advantage of the BSC.
2) how the characteristics/culture of the organisation and the healthcare sector affected the extent of BSC adoption and the process of adoption.
3) the different processes (Critical Success Factors) used within the Healthcare organisations to try an embed the BSCs into their everyday business and the perceived barriers to the BSC implementation.
4) in depth relevant case studies highlighting the similarities and differences in terms of the adoption factors, the process used to try and implement the BSC and the roles that the BSC performed in these organisations and briefly highlighted the possible outcome impacts.

1.4 Practical and Theoretical Contributions

By clearly identifying the factors that influence the adoption of the BSC, the study can inform practitioners, about where BSC implementation may be most justified. This information could potentially be used by a manager when deciding whether the BSC is an appropriate technique for their organisation. It could also be used to assess an organisation's ability to successfully adopt the technique within its already established structure, or whether there is a need for change, and what that change might be. The identification of the factors that have proven critical to the successful adoption of the BSC and also barriers to BSC implementation will also be of interest to practicing healthcare managers. Many of the factors identified are important in any change program not just BSC implementation.

This research thesis extends the BSC body of knowledge by exploring those factors that have influenced the adoption of a BSC and the process of implementing the BSC within the healthcare sector. It will also extend the body of knowledge in the innovation literature, by testing the idea that the (innovation) adoption choice is influenced by some common factors, combined with specific factors that relate to the particular innovation (Castner, 2003; Brown et al., 2001). This extension has resulted in the development of a BSC Adoption Model (Model 1) and a Model outlining the critical success factors (Model 2) necessary for implementing a change project such as the BSC.

There appears to be little prior research documenting and comparing the different processes of adoption that the BSC has taken within Healthcare and the outcome of such processes. It was difficult to predict the nature of the results that emanated from this aspect of the research, nevertheless it has become a very important dimension of this BSC research, resulting in a model (Model 2) that can inform both the literature and practitioners alike.

Examining how the healthcare industrial setting affects both the adoption factor, the process of adoption, and roles of the BSC, has added to the small body of literature in this area. It may be possible in future studies to establish a link between an industrial sector and the composition assumed by a BSC. This would be particularly useful to practitioners in those industries, as it may be that a standard composition of BSC with scope for tailoring to the uniqueness of each organisation could be developed. A base generic format for hospitals could signify a significant

cost saving for other hospitals interested in adopting the BSC. Although the relative advantages could be lost if it is not tailored to the local strategic agenda.

Also, by investigating the process of successful adoption of the BSC coupled with the range of roles performed by the BSC in healthcare organisations, the literature in this area has been extended. The outcomes of this aspect of the research would also be of interest to practising managers, as it provides them with information about what factors are essential for the successful adoption of the BSC. Therefore, they could make sure these factors are in place as necessary to achieve a successful implementation of the BSC. This research also highlighted that the larger the range of roles that the BSC played within particular healthcare organisations, the greater the impact on the successful outcomes from the BSC and hence its embeddedness.

To ensure that the contribution to the literature was based on a robust research design, the study used triangulation of both the literature and methods. The research drew on Diffusion of Innovation, Activity-Based Costing (ABC) adoption research and Information Systems innovation research, Balanced Scorecard adoption research and Resource Based View of the firm as its contextual base for the development of the BSC Adoption Model (Bharadwaj, 2000; Booth and Giacobbe, 1998; Krumwiede, 1998; Clarke et al., 1997; Anderson, 1995; Wolfe, 1994; Barney, 1991; Kwon and Zmud, 1987). (Refer to Appendix C prior contingency research factors table). Management Control Systems (MCS) research (Chenhall, 2003), Contingency research (Lee & Yang, 2011), BSC and MCS research in the healthcare sector, and BSC adoption and process research, (Dimitropoulos, 2017, Rodgers, 2011) were drawn upon to develop a second model around successful implementation of the BSC. The major additions to this model was the need to competently manage the known barriers to successful adoption of the BSC, and also the importance of identifying the stakeholders and managing these relationships by allowing participation, inclusion and ongoing communication. Furthermore, that the BSC adoption project is best managed and provides better outcomes when it is undertaken as part of a major change process.

1.5 Methodology

The methods used to collect the relevant data for the development of the two models was achieved firstly, through the analysis of information provided by a series of Exploratory Interviews conducted with heads of the Balanced Scorecard projects within healthcare

organisations. These organisations included Public, Private and one Public/Private provider. Secondly, Case Studies were used to collect data, through observations at meetings, at different stages within the development of the BSC and through documentations provided by these organisations. This allowed for a more in-depth understanding of the adoption factors, the process of implementation factors and the roles the BSC assumed within those organisations adding strength to the models and providing possible explanations for any anomalies within the data.

1.6 Organisation of this thesis

The remainder of this thesis is organized into the following chapters:

The second chapter provides a review of the BSC literature, as it relates to the concept of a BSC, and the evolution of the BSC themes. This section is followed by a discussion of the conceptual and theoretical frameworks, that set the groundwork for the development of the BSC adoption model (Model 1). Model 1 outlines the factors affecting the extent of BSC adoption and its perceived relative advantage. The theoretical framework around this model, included theories from; Diffusion of Innovation, Information System Innovation, Activity-Based Costing Adoption and Resource-Based View of the firm literatures. This discussion led to the development of research question 1 of this research.

The second half of this chapter, focuses on the relevant MCS and BSC literature as it pertains to the characteristics and culture of the Healthcare sector, leading to the development of research question 2. The next section includes a discussion of the theoretical frameworks used in the development of Model 2, namely: Diffusion of MCS and MCS Contingency theory. This literature combined with Rodgers' 2011 Critical Success Factor model, led to a modified model of successful adoption being proposed. Leading to the development of research question 3a and 3b to examine successful adoption. The last section was a discussion of the potential roles that the BSC can play within an organisation and a brief discussion of decision-making processes theory. This provided additional theoretical framework for the development of Research Question 4.

The third chapter outlines the research methodologies that were utilised within this study. Two qualitative methods were used. The first was a set of semi-structured interviews of personnel

that were involved in the development of a performance measurement system within their organisation and provides the basis for the findings in chapters four and five. The second was identification of two divergent exploratory case studies within the interviewees, that involved an additional stage of observation and documentation.

The fourth chapter outlines the BSC adoption factors (Model 1) (RQ1) findings from the exploratory interviews and the cultural impact findings (RQ2) and Critical Success Factor process model (Model 2) (RQ3) that impacted either the adoption of or partial adoption or rejection of the BSC within the organisations.

The fifth chapter outlines the two comparative case studies, in line with the preceding chapters, adoption factors, implementation process and an added dimension of the impact of the roles the BSC performed within these organisations. This chapter presented findings for Research Question 1, Research Question 2, Research Question 3a and b, and Research Question 4 as they related to the case studies. It also contains tables summarising the major differences and observed outcomes of these differences within the two organisations.

The sixth chapter summaries the earlier chapters and draws conclusions about the research questions examined and the implications of these findings for practitioners and theory and model development within the diffusion of innovation literature, BSC adoption literature and the contingency theory. This chapter also includes suggestions for future research in this area.

CHAPTER 2 - LITERATURE REVIEW OF THE BSC AND BSC ADOPTION AND CRITICAL SUCCESS FACTORS MODELS

The focus of this chapter is on the conceptual and theoretical foundations for the present research and research questions. The chapter begins with the evolving themes around the BSC, it's claimed superiority over other performance measurement systems and how it goes beyond being a traditional measurement system to a strategic management system, and to managing alliances. This is followed by a discussion of the conceptual and the theoretical frameworks around factors that affect BSC adoption and successful implementation of the BSC. The theoretical framework contains a review of Diffusion of Innovations, Resource-Based View of the firm, Information System Innovation, Activity Based Costing Adoption, and BSC adoption and implementation, which are drawn upon to develop a 'BSC Adoption Model' (Model 1). Secondly, a review of literature around the characteristics of healthcare which might affect adoption is outlined. Thirdly, the literature outlining factors that might affect the Diffusion of MCS and the BSC within the Public and Healthcare sector are used to develop a second model 'Critical Success Factors for BSC Adoption'. Lastly, the literature around roles of the BSC are examined, as this literature in conjunction with the above literature forms the basis of informing reasons/explanations for the outcomes in each of the case studies.

2.1. Evolving themes around the concept & uses of the BSC (1990 - 2016)

From 1990-1992 Kaplan and Norton promoted the BSC as an excellent measurement tool. As the BSC contained in addition to traditional financial measures, performance measures relating to customer delivery times, quality and cycle times of manufacturing processes and effectiveness of new product developments (Kaplan & Norton, 1996a, p. vii). The reliance on financial performance measures was viewed as hindering organisations' ability to create future economic value.

Kaplan and Norton argue the BSC provides benefits that extend beyond a traditional measurement system.

> "It is a top-down reflection of the company's mission and strategy; it is forward looking; it integrates external and internal measures, and it helps a company focus. Together these characteristics enable a scorecard to serve as a means for motivating and implementing breakthrough performance." (Kaplan & Norton, 1992, p. 1).

If these claims are true, then it appears reasonable to anticipate widespread adoption of the BSC.

In the years 1993-1996 they promoted the BSC as useful for translating 'an organization's mission and strategy into a comprehensive set of performance measures that provide the framework for implementing its strategy.' (Kaplan & Norton, 1996a, p. 2). It measures an organization's performance from four key perspectives: financial, customer, internal business processes and learning and growth. The term "balanced" indicates that the scorecard should have, both financial and non-financial measures, with lead and lag measures and a mix of objective and subjective measures. Kaplan and Norton (1996c), demonstrate how the scorecard helps a company clarify and update strategy, communicate that strategy throughout the company, align unit and individual goals with the strategy, link strategic objectives to long-term targets and annual budgets, and conduct periodic performance reviews to improve strategy. That is, the BSC becomes the cornerstone of an organisations' strategic management system. The implication is that all organisations regardless of their strategy, sector (profit or non-profit) or industry can implement a BSC that should enhance their management performance. It is in light of these claims, ideas and processes that the factors to be examined in the study have been selected (note section 2.5).

Kaplan and Norton (1996a) suggest that the linkages between the four perspectives (mentioned above) are critical to the success of the adoption of the BSC and hence implementation and embedding. But more importantly to the gaining of benefits both financial and non-financial from the adoption of the BSC as a strategic management system. However, Malmi (2001 p207) stated that their findings suggested that the idea of linking measures together based on assumed cause-and-effect relationships was not well understood by the early adopters of BSCs. Since then, numerous articles have appeared in the literature about the BSC and strategy including Steele (2001), and Zagotta and Robinson (2002).[2]

From 2000-2002 Kaplan and Norton promoted the use of Strategy Maps. As part of their research they identified five common principles at work within successful BSC organisations (2001c):

Principle 1: Translate the Strategy to Operational Terms: 'Strategy maps"

[2] Frigo and Litman (2001) suggest that combining BSC with Value-Based Management (VBM) would help organisations to execute their strategy effectively. They distinguish between the identification of strategy and the execution of strategy. Frigo (2002a) asked "Are non-financial measures the key to better strategy execution?" Epstein and Manzoni (1997) examined how the Balanced Scorecard helps an organisation translate its strategy into action and compared it to the 'Tableau de Bord' used in France. Malina and Selto (2001) examined evidence on the effectiveness of the BSC as a strategy communication and management-control device.

Principle 2: Align the Organisation to Strategy.
Principle 3: Make Strategy Everyone's Everyday Job.
Principle 4: Make Strategy a Continual Process.
Principle 5: Mobilize Changes through Executive Leadership.

Kaplan and Norton (2004) emphasised the learning and growth perspective, by outlining a guide to aligning intangible assets with strategy and performance measurement. The ability to mobilise and exploit an organisation's intangible assets has become a more important factor in determining success. This is because, intangible assets enable an organisation to develop customer relations, introduce innovative products and services, produce high-quality products customised at lower costs with short lead times, and mobilise employees' skills and motivation towards continuous improvement (Kaplan & Norton, 2004. P. 2-3 & 10-17).

In Kaplan and Norton (2006) the focus, then became on creating corporate synergies, by strategically aligning: the four perspectives, investors and boards, and external parties. In Kaplan et al. (2010) the focus became about managing alliances. As alliances are central to many companies' business model, alliance strategy maps were developed. This collaboration theme of the BSC then serves as a governance and monitoring tool.

In Kaplan and Norton (2016), the conversation shifted to talking about strategy executions. The commentaries highlighted the role the BSC had played in strategy formulation, communication and implementation, but not so much on strategy execution. Kalender and Vayvay (2016) suggested that 'sustainability' be added as a possible fifth perspective to the BSC.

Many organisations are turning to a variety of improvement initiatives: total quality management, just-in-time production and education systems, time-based competition, lean production, building customer focused organisations, activity-based cost management, employee empowerment, and business process reengineering. Each initiative having demonstrated success stories, champions, gurus, and each competing for the time, energy and resources of senior executives. This raises the issues of 'how and why do organisations choose certain initiatives?' and 'do some initiatives work better in combination?'. These questions and the following discussions led to the development of Model 1 (page 40).

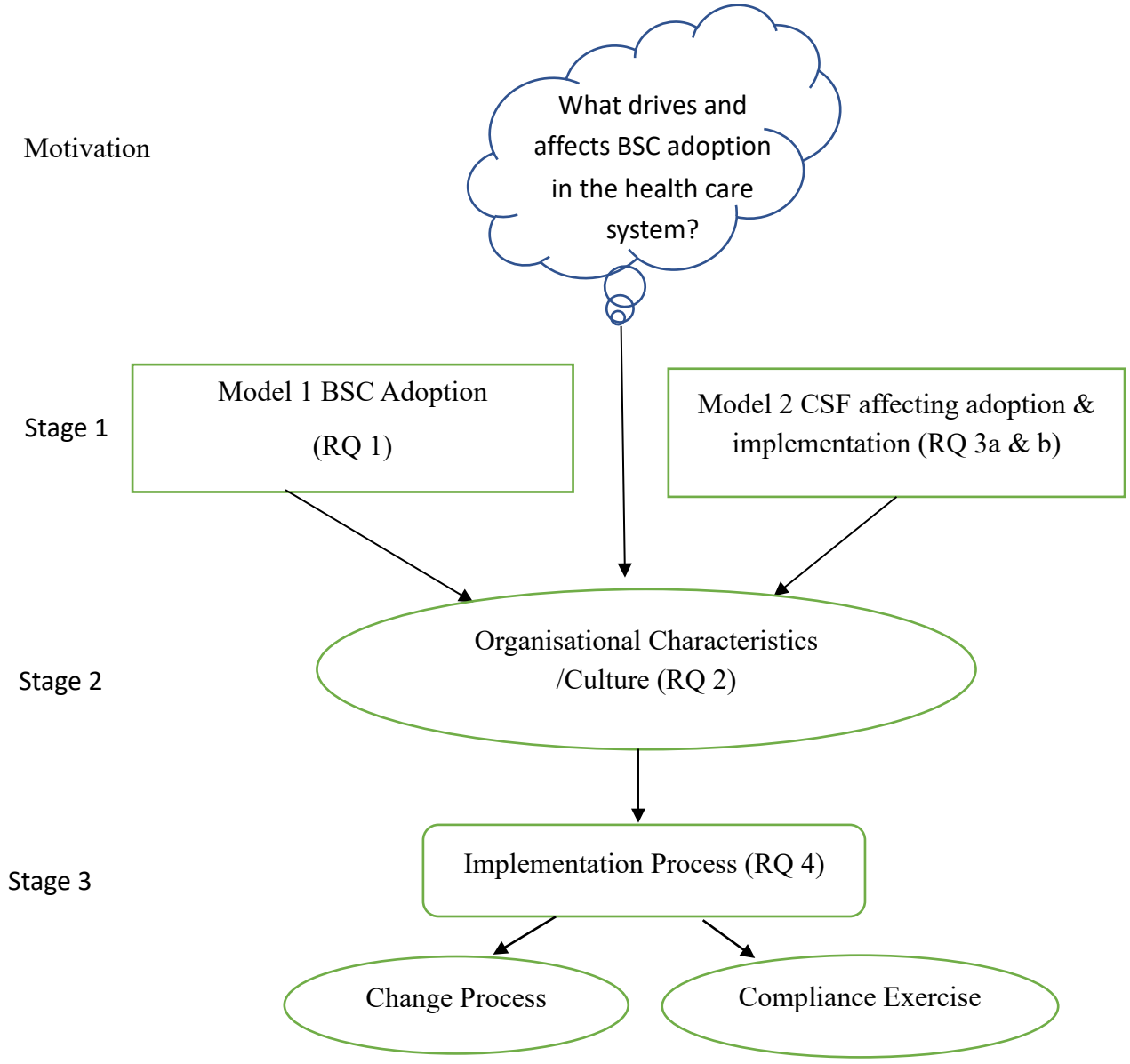
Kaplan and Norton claim that breakthroughs in performance require major change and this

includes change in the measurement and management systems used by an organisation. They believe this cannot be accomplished merely by monitoring and controlling financial measures of past performance. This is where they believe that the BSC is superior to the traditional methods used. Having discussed the concept of the BSC and it's evolving themes, the next section will outline the conceptual framework upon which this research is based.

2.2. Conceptual Framework

Based on the literature to follow in sections 2.3-2.6, a conceptual framework has been developed. Diagram 2.1 below illustrates the conceptual framework within which the research questions for this thesis have been framed.

Diagram 2.1 Conceptual Framework



The conceptual framework (CF) above identifies the motivation for the research in this thesis. Then Stage 1 of the CF examines the factors that affect the adoption and implementation of the BSC as the organisations performance measurement/management system. Here model 1 the BSC Adoption model (RQ1) and model 2 (RQ3 a & b) the Critical Success Factor for implementation model are examined to establish what organisational, technological, environmental, and political factors affect the successful adoption of the BSC.

Stage 2 examines the impact of the organisation's culture/characteristics (RQ2) on the BSC adoption model and the critical success factors (CSF) in the implementation process model. Within this stage the impact of organisational characteristics, healthcare characteristics and culture on the successful implementation of the BSC is examined.

Stage 3 examines whether the results of a successful implementation will be more impactful, with greater outcomes, if the BSC is implemented as a complete change process and not as a piecemeal or compliance exercise (RQ4). This idea led to the modification of Model 2 CSF to sit within the frame of a change process.

There are three possible outcomes, in terms of BSC adoption. The first is that the BSC is used as a performance measurement and management system, referred to as 'embedded' in this thesis. The second is that the BSC is only used as a performance measurement system. In this thesis, this will refer to those organisations that have developed the measures but are only using them for compliance reasons not as a strategy driver. The third outcome is that the BSC is dropped or abandoned.

Research Question 4 will also briefly examine the potential organisational, behavioural, sociological or political outcomes from the successful implementing of the BSC.

2.3. Theoretical Framework around BSC Adoption and Implementation

This section outlines several theoretical bodies of literature that have been drawn upon to select the BSC adoption and successful implementation factors to be examined in stage 1 of this research. These bodies of literature include: Diffusion of Innovations, Resource-Based View of the firm, Information System Innovation, Activity Based Costing Adoption, and BSC adoption and implementation.

2.3.1. Diffusion of Innovation

Similar to Vaz Lopes et al. (2015) this thesis has used Diffusion of Innovation Theory to inform the research. Wolfe (1994, p. 407) reviewed the literature in organisational innovation, and identified three streams of research, namely: diffusion of innovation research, organisational innovativeness research, and process theory models research. In Diffusion Innovation research, the type of research question is: "What is the pattern of diffusion of an innovation through a population of potential adopter organisations?" The research focus is on the "diffusion of an innovation (e.g. BSC)" over time and/or space. The objective of this type of research is to explain rates and patterns of innovation adoption. Data collection in this type of research has tended to be by survey questionnaire (e.g. Attewell, 1992; Teece, 1980) or expert judgment (e.g. Souder and Quaddus, 1982), or archival (e.g. Fischer and Carroll, 1986).

Rogers (1983) suggests that the following characteristics influence the innovation diffusion process: (1) adopter characteristics (i.e. Healthcare); (2) the social networks to which the adopters belong (i.e. department/silos); (3) innovation attributes (i.e. administrative); (4) environmental characteristics (i.e. politics); (5) the process by which an innovation is communicated (i.e. management style), and (6) the characteristics of those who are promoting the innovation (i.e. consultants, champion).

Drawing from a wide variety of literature across a number of disciplines, Smith (2000) identified innovation characteristics. From this Diffusion Innovation research many of the following factors were chosen to form part of either Model 1 or 2 within this thesis. ***Aspects of the innovation:*** is the BSC administrative or technical innovations; does it have a radical or incremental impact; central or peripheral impact; was it pervasive; compatibility; complexity and did it provide relative advantage? ***Aspects of the innovators,*** organisational structure, i.e., centralization; vertical differentiation; complexity; size and type. Organisational culture**,** i.e. leadership style; a 'learning' organisation; empowered employees; participation. Organisational strategy**,** propensity to innovate; implementation capability; flexibility.

Rogers (1983) and Smith (2000) noted that a limitation of the diffusion innovation research model is its stringent assumptions. These include an invariant unit of innovation and a definable population of potential adopters who are more or less equivalent. Wolfe (1994), also identified a number of "barriers to knowledge" in the organizational innovation literature: the

lack of specificity concerning the innovation stage upon which investigations focus; the minimal consideration given to the innovations' characteristics; that research is being limited to single-organisational-type studies; and researchers have limited their scope of inquiry by working within single theoretical perspectives. This study overcomes some of these barriers by recognising there are stages of adoption, by incorporating the characteristics of the innovation (BSC) and by using multiple organisational sites and triangulation of theoretical perspectives and methods.

Errami and Guehair, (2018) paper was based on approaches pertaining to contingency and innovation diffusion theories and processes questionnaire data from a sample of 80 French companies. Their results showed a notable positive influence of manager's Innovativeness. Manager's influence was also examined in this study because of inconsistent results.

Zaman and Yoon, (2016) noted that Chenhall (2003) identified size, strategy structure, environment, and technology as determinants of designs in MCSs of organizations. And also, that Otley (2016) recently mentioned strategy, environmental uncertainty, and national culture as contextual factors related to the use and implementation of management accounting and control practices. Hence, they concluded in their review paper that traditional contextual factors, such as size, strategy, culture, intensity of market competition, and organizational structure, influence the use of performance measures in organizations. Zaman and Yoon also identified some unusual factors that influence the use of performance measures, such as product lifecycle stage, nature/type of performance measures used, individual manager influence, reliance on human capital, and technological factors. Zaman and Yoon then called for more research that looked at both the structure and culture, and also for more replication of these factors to strength the theories claimed. This research addresses both of these issues and also includes technology factors.

Gosselin, 2011, examined the association between following contextual factors: strategy, structure and environmental uncertainty, and the design and use of performance measurement systems in manufacturing business units. Gosselin found that there was significant association between the type of strategy, the organisational structure and environmental uncertainty and their use of non-financial and process type measures. This type of research could also be examined in healthcare to see if the associations still holds true or whether the industry has an impact on these associations as well.

The diffusion studies above were in the private and mainly large organisation, it is appropriate to now look at the literature in the public sector. Although the researcher repeats here that the stage 1 of the conceptual framework involved the reasons for adoption/diffusion and for nearly all of the organisations Lapsley and Wright (2004) examined the dissemination and adoption of management accounting practices within the new public sector. They noted that:

> "For diffusion to take place, Rogers (1983, 1995) maintains that there must exist to begin with, an idea or innovation to be diffused. …. Secondly, there must exist a population of potential adopters of this innovation. Finally, there must be communication flows between the innovation developer and potential adopters. Diffusion is said to occur when an innovative technique has been adopted by an organisation as opposed to dissemination which is the absence of the adoption of the relevant technique. Diffusion is not an automatic consequence of innovation and its ease of progress is subject to favourable factors existing within its environment. Adoption, for example, is contingent upon the degree of benefit the innovation will bring to the organisation; the consistency of the innovation with the adopters' existing values; the complexity of the innovation; the potential of the idea for being implemented on a trial basis, and the ease of observing the resulting benefits (Rogers, 1995)." (cited in Lapsley & Wright, 2004, p. 356).

Lapsley and Wright note that 'the crucial element in all diffusion processes, therefore, is the internal and external networks through which potential adopters learn about innovations that are relevant to their organisation's requirements' (p. 356). Clegg et al. (1996, p. 9) state that networks "encompass a loosely coupled cellular structure of value adding activities that constantly introduce new materials and elements". This literature tended to focus on the relatively formal relationships between organisations assuming that information flows along existing lines, is direct and every actor has an equal opportunity to engage with other actors in the network. This may not be true in all cases:

> "Informal networks such as collaborations between organisations, universities, professional institutions and informal meetings between friends may also play an important role in the diffusion of an innovation (Swan and Newell, 1995)." (cited in Lapsley and Wright, 2004, p. 356).

Studies on diffusion tend to concentrate on the demand for an innovation, with potential adopters seeking a change in their accounting practices. However, suppliers may be promoting

new accounting ideas independently of whether the technique is perceived as being required by an organisation (Bjornenak, 1997). Promoters must choose the right channel of communication in which to propagate the idea and promote it in a suitable way (Rogers, 1995). Promoters may also experience barriers in the communication, such as geography and language (Rogers, 1995). Diffusion is as much a process by which new technologies are developed as it is a process by which the technologies are dispersed (Bjornenak and Olson, 1999). This means adoption is also a process, not an automatic adjustment.

Most studies into diffusion, addressed in this thesis have been directed to private sector organisations, although these studies can provide some useful insights into the public sector. Bjornenak (1997) describes three types of diffusion processes. The first relies upon skilled workers moving about and causing change. Contagious diffusion occurs when information is spread in a smooth and random way; and Hierarchical diffusion occurs when information is dispersed through trickle-down process. Bjornenak, in contrast to Cooper's prediction (1988), found that ABC was more common in firms experiencing less competition and with lower product diversity than its counterparts. Bjornenak reported a weak correlation between the demand for information by organisations and adoption rates. A fuller explanation may arise if the suppliers of the innovation had also been studied.

Malmi (1999, 2001) explored ABC diffusion across Finnish firms, building on the conceptual matrix by Abrahamson (1991). Most adoptions are assumed to occur because of the benefits and efficiencies gained through implementation. However, Abrahamson (1991) adds three other perspectives to the efficient-choice selection. *Forced* selection results if one supplier has influence over all interested parties and thus the motive of the adopter may not play a part in implementation. The *fashion* perspective is applied when many potential adopters are implementing an innovation yet still retain a choice over whether to implement or not. The *fad* perspective describes organisations adopting a technique in order to appear legitimate and retain a competitive advantage. Malmi (1999) found that the earliest adopters usually fall under the efficient choice perspective or forced selection. The fashion perspective plays a more important role in the increasing rate of adoption. Malmi (1999) concluded that there was little evidence of the third perspective as it was unlikely that management accountants would implement a new technique without some rational basis.

Perera et al. (2003) studied transfer pricing in a Government Trading Enterprise. Crucial to

this study was seeing adoption as a two-stage process. The first stage arises when a policy decision is made by senior management to adopt a certain accounting technique; the second is when the new technique gains acceptance by individual staff. Jackson and Lapsley, (2003) looked at management accounting innovation in use in the public sector. These innovations included costing, budgeting and performance measurement tools. Jackson and Lapsley found that most of the innovations were taking place in performance measurement. Key performance indicators (KPIs) were used by a very high percentage of all public sector organisations. The balance scorecard was less well used in local and government agencies. In Jackson and Lapsley's survey they found that with regard to budgeting techniques, resource management was the most popular with 34% of organisations utilising this tool. The healthcare sector made use of budgeting techniques, with organisations using zero-based budgeting as well as either resource management or activity-based management (ABM).

Jackson and Lapsley (2003) found that the area of costing showed least activity in terms of implementation of new technologies; activity-based costing was the only method that had significant levels of implementation across the public sector. Strategic cost management was in use within a small number of healthcare organisations, but target costing had a very low reported use. Jackson and Lapsley's study also showed that local authorities and government agencies were heavily involved with innovative techniques in performance measurement and were showing reasonable interest in budgeting techniques, but it was only the healthcare sector that showed strong involvement with all categories of new accounting techniques. Jackson and Lapsley also noted that there was little experimentation with new techniques which was probably due to lack of time and/or resources.

To date, this area of research focuses predominantly on the examination of what techniques are in use in public organisations (Chan, 2004; Lang, 2004: Ho & Chan, 2002, Kidwell et al., 2002). It also includes case studies about certain public organisations' experience with the BSC (Phillips, 2004; Griffith, 2003; McAdam & Walker, 2003; Kloot, 1999) and suggestions on how to modify the BSC for public organisations and religious organisations (Dobrzeniecki & Barkdoll, 2004; Kubiak, 2003; Keyt, 2001: Kloot & Martin, 2000; Barkdoll, 2000). This study will add to this literature by firstly examining the factors that have affected the adoption of the BSC, and perceived relative advantage of the BSC through the BSC Adoption Model and secondly examine the success of the implementation process, including the management of the potential barriers to BSC adoption in the public and/or service sectors.

2.3.2. Resource-Based View (RBV) of the firm, Information System Innovation & Activity-based Costing Adoption

The resource-based view of the firm contends that the performance of a firm is, amongst other things, a function of the firm's resources that it has in place, that are firm-specific (value), rare and difficult to imitate or substitute (Barney, 1991). This view aligns with Coase's (1937) view of the firm. That is, a firm is a set of coalitions that have aligned themselves in such a way as to reduce the cost of producing goods and services for delivery to the marketplace (Ferguson et al., 2003). The firm's resources are defined as including all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. (strengths) controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness (Daft, 1983).

Barney (1991) points out that information processing systems could be a source of sustained competitive advantage. Machines are unlikely to be a source of competitive advantage, but an information processing system that is deeply embedded in a firm's informal and formal management decision-making process may hold the potential of sustained competitive advantage. As it is a socially complex system, it will probably be imperfectly imitable (Barney, 1986, 1991). A refinement of this resource-based view is that a firm can "create a competitive advantage by assembling resources that work together to create *organizational capabilities.* Capabilities, refer to an organization's ability to assemble, integrate, and deploy valued resources, usually in combination or co-presence." (Bharadwaj, 2000, p. 171).

Information technology capabilities are a major subset of organizational capabilities and recent studies have identified a number of specific information technology capabilities that provide organisations with a competitive advantage (for example, managerial information technology skills (Mata et al., 1995); and human information technology skills (Ross et al., 1996)). Bharadwaj (2000) classifies a firm's key information technology capability as comprising (1) a physical information technology infrastructure, (2) human information technology resources (including technical information technology skills, and managerial information technology skills), and (3) intangible information technology-enabled resources (such as, customer orientation, knowledge assets, and synergy).

> "Viewed from the RBV perspective, the unique characteristics of the IT infrastructure that enable firms to implement the right applications at the right time render the cost and value of technological innovation different for different firms. Indeed, IT infrastructures that enable firms to (1) identify and develop key applications rapidly, (2) share information across products, services, and locations, (3) implement common transaction processing and supply chain management across the business, and (4) exploit opportunities for synergy across business units represent the type of causally ambiguous resources (Reed and DeFillipi, 1990) that are central to the resource-based view." (Bharadwaj, 2000, p. 173).

The combination of unique IT infrastructure and strong human IT resources with IT-enabled intangibles can lead to sustainable advantages over competitors. IT systems thus enable knowledge formalization and consolidation of previous knowledge gains and their leverage across the organization. This leads to specialized assets that are almost impossible to imitate by competitors. Note though that effective knowledge management is an inherently social process that requires tremendous organizational change. This change includes change in structure, control and communication systems, and reward structures. Hence, utilising these IT infrastructure and IT resources in conjunction with a BSC system, might allow organisations to gain a competitive advantage.

Anderson (1995) when examining the factors that might influence the adoption and implementation of ABC used Kwon and Zmud's (1987) five broad categories as her framework. Namely: *individual characteristics, organisational factors, technological factors, task characteristics and environmental factors.* Brown et al. (2001) identified 50 adoption factors that have been considered in the ABC adoption and information system innovation literatures[3] and classified them according to these five categories (see Appendix B). This study treats these factors as being potentially applicable to the adoption of a BSC.

Kwon and Zmud (1987) identified the *task characteristics* category as relating more to the implementation rather than the adoption stages. No *individual characteristics* were examined in this study but is an area for further research. Miville (2005) examined 'individual

[3] Brown et al., (2004) stated "The IS innovations factors were identified from … reviews by Wolfe (1994), Prescott and Conger (1995), Swanson (1994) and Kwon and Zmud (1987) that comprehensively categorize this literature and identify the factors that have been found to consistently influence the adoption of IS innovations".

characteristics' on the adoption of the BSC without achieving significant findings. Roberts (1999) argues that reliable measurement of such characteristics requires both access to a range of representative respondents within a firm and a depth of study like a longitudinal case study. *Environmental factors* have been shown to have some viability in the Information System Innovation literature, but for the ABC Adoption literature, the findings have been equivocal (Booth & Giacobbe, 1998; Bjornenak, 1997; and Gosselin, 1997). This study has included an environmental factor: organisational culture. This study also focuses on several key factors from these categories.

2.3.3. BSC Adoption and Implementation Literature

As discussed above one of the frequently found themes in the literature concerns, the yet to be proven view, that all organisations, regardless of their nature, can and should implement a BSC as this can instil improved performance.

As outlined by Singh and Sethi (2017), through their systemic in-depth review of the BSC literature, the BSC had been studied from differing viewpoints. Perkins et al., (2014), Cooper et al., (2012), Bible et al., (2006), Kaplan and Norton, (2006), Norreklit, (2000), all studied the evolution of the BSC concept. Cooper et al. (2012) and Braam and Nijssen (2004) examined the adoption and diffusion of the BSC in organisations. The BSC implementation and usage was explored by Madsen, (2011, 2012), Gosselin, (2011), Hansen and Mouritsen, (2005), and Braam and Nijssen (2004).

Other areas of BSC research pertains to the different phases/stages (types) of BSC employed by organisations (Speckbacher et al., 2003; Cobbold & Lawrie, 2002; Brudan, 2005; Soderberg et al., 2011 and Perkins et al., 2014). There is also some research around the effects of BSC use on performance of organisations (Davis & Albright, 2004; Braam & Nijssen, 2004; Chan & Seaman, 2008; and Farneti & Guthrie, 2008). Some of these findings will be referred to but are not the main focus of this study. There are also studies on the BSC shortcomings and challenges (Northcott & Taulapapa, 2012; and Norreklit & Mitchell, 2014). These types of studies will inform Model 2 Critical Success Factors of this study.

As identified by Singh and Sethi, (2017) there is negligible attention being paid to the study of predictors (antecedents) of BSC and the outcomes (consequences) of BSC implementation. Singh and Sethi call for deeper investigation into these areas, as this research does.

So, if the BSC is so superior to other performance measurement/management systems, it seemed logical to measure the adoption rates of the BSC. The following is some of the researched adoption rates in the first decade of the BSC. As can be seen, surprisingly the adoption rates were not as high as expected. A report by Business Intelligence (Anonymous, 2001a) found that 57% of 200 companies surveyed in 20 countries had adopted a BSC and of the current non-users, 56% planned to adopt the model within the next year. Between 1993-1999, Rigby (2001), surveyed over 10,000 senior executives across 15 countries and found that 43.9% of the companies surveyed were using a BSC, 6.6% were dissatisfied with the BSC and 11.3% have discontinued using a BSC. Rigby also surveyed 200 members of CPA Australia's Hong Kong division and found that 51% indicated that their organisation had a formal system to measure performance, but only 25% were familiar with the BSC approach to performance measurement. Banker et al.'s (2001) survey of over 170 (US) companies, found that 35% use or have used a BSC, and that 53% of the 35% were satisfied with the methodology.

A study reported by Chenhall and Langfield-Smith (1998a) provides findings that are relatively inconsistent with other empirical works. Chenhall and Langfield-Smith, surveyed 140 large Australian manufacturing firms. The researchers noted that 88% of their respondents claimed to have adopted (with moderate benefit) a management accounting technique that Chenhall and Langfield-Smith identified as: "Performance evaluation: BSC (mix of financial and non-financial measures)". Possible reasons for Chenhall and Langfield-Smith findings differing with other studies include the fact that they surveyed only large Australian manufacturing firms, and the difficulty of operationalising the BSC construct. It is not surprising that businesses are including non-financial measures, as this study captured. But the BSC is not just about a collection of non-financial measures and it is the linkages and the focus on strategy and synergies that brings the benefits.

Over the last two decades the BSC has become extremely popular in the Healthcare and Public sector, which makes it an ideal setting for this study (Pasaribu et al., 2016, Zastempowski, 2015; Spekle & Verbeeten, 2013; Decramer et al., 2008; Knutsson et al., 2008; Hoque & Moll, 2001). In 2015, the Bain and Company's biennial survey of global management practices (Rigby & Bilodeau 2015) ranked the BSC sixth among the 25 tools used by management globally. Hoque (2014) when summarizing 20 years of BSC publication in top journals, reports that the BSC is a useful tool for management control.

It should be highlighted however that Epstein et al., (1997) noted that the importance of non-financial measures of performance is not a new idea (e.g. General Electrics in the 1950's), but they have grown in use, due to growing international competition and globalization, and the rise of other techniques like Total Quality Management (TQM) and Value-Based Management. But the superiority of the BSC, as noted earlier, is claimed because it explicitly focuses on '*links'* among business decisions and outcomes.

It was suggested earlier that the BSC can be used to guide strategy development, implementation, and communication. Hence, when properly constructed, it should be able to provide feedback for use in both management control and performance evaluation. Based on these claims, it would seem reasonable to expect widespread application of the technique. Widespread adoption was not observed in the first decade after the balanced scorecard's introduction to the management control systems literature, but studies have shown an increase in the use of the technique, especially in the non-profit and government sectors (Lapsley et al., 2004; Chan, 2004; Lang, 2004; Ho & Chan, 2002; Kidwell et al., 2002).

Amongst this research has been several papers written about who should utilise a BSC and how to implement a BSC (Parmenter, 2002; Berkman, 2002; Roest, 1997). Some of the research sets out the principles and techniques that should be followed to succeed in the implementation of a BSC[4] and others take a more industry specific approach. Mooraj et al. (1999), claim that the BSC is a 'tool which adds value by providing both relevant and balanced[5] information in a concise way for managers, creating an environment which is conducive to learning organisations' (p. 481).

Other commentators have focussed on how the BSC can be used in specific industries. Hanson et al. (2000) documented the benefits of the BSC for Credit Unions. Rousseau et al. (1999/2000) examined some of the common pitfalls of the BSC and what it takes to succeed for financial institutions. Dalton (2002) suggests that not for profit associations could make

[4] Parmenter (2002) identifies a 10-point plan to follow to generate more successful implementation programs. Roest (1997) described '10 golden rules' for implementing the balanced BSC. Berkman (2002) identified four principles for successful implementation of a BSC.

[5] Numerous articles have been written focusing on the fact that the BSC should be exactly that - "balanced". (Stivers & Joyce, 2000; Lawton, 2002; Preston, 2002; Nørreklit, 2000).

considerable use of the BSC to achieve their 'mission/strategy' and illustrates how this might be accomplished by using examples and diagrams. The BSC literature also contains numerous case studies to illustrate BSC implementation (for example, Szabo & Sidor, 2014; Phillips, 2004; Papalexandris et al., 2004; Griffiths, 2003; McAdam & Walker, 2003; Malmi, 1999, 2001; Kloot, 1999).

2.4. BSC Adoption Model 1 (Stage 1 CF)

Having discussed the theoretical framework above, the next section will discuss the adoption factors from the theory that were chosen to be studied in this research. The factors examined in this research were chosen for one or more of the following reasons. Firstly, the factors have had significant support in either the Diffusion of Innovations, Resource-Based View of the firm, Information System Innovation, Activity Based Costing Adoption, and BSC adoption and implementation literature. Secondly, the factors have prima facie relevance to BSC as an innovation (determined by examining the characteristics of the BSC noted in the literature). Thirdly, that these factors have been proven as useful in explaining innovations in either the BSC, ABC and/or Information Technology adoption literatures. Finally, the factors must have been well defined and/or have well developed concepts.

Based on the four reasons in the above paragraph, this study examined the following organisational factors: top management support; champion support; consultants' involvement, organisational size, compatibility and SBU and/or product complexity and diversity. Organisational factors are those that relate to the internal environment, culture and processes within an organisation. With the exception of organisational size, there had been little contingency research on these factors within the BSC literature, even though some research has been completed in the ABC adoption literature (Zaman & Yoon, 2016; Rodgers, 2011; Silva & Prochnik, 2005; Voelker et al., 2001; Booth & Giacobbe, 1998; Bjornenak, 1997; Clarke et al., 1997; Van Nguyen & Brooks, 1997). Rodgers (2011) and Zaman and Yoon, (2016) called for further study of these factors and their impact on BSC implementation, especially in the public and healthcare sectors.

Vaz Lopes et al., (2015) studied the process of adoption, implementation, and utilization of the BSC in a major cooperative Brazilian agro-industrial company using the theory of diffusion of innovation. A qualitative research approach was taken to allow a detailed exploration of the

experiences of the participants, in the process of adoption of the BSC on the organization. Vaz Lopes et al. conducted semi-structured interviews with the main actors involved in the decision-making process of adoption and implementation of the BSC. The findings were that the adoption of BSC in the company was mainly motivated by the search for efficiency in relation to the system used to evaluate performance, and communicate, implement, and manage strategy. The decision for BSC was taken by top level administration who participated in the process and provided the resources necessary so that the BSC would be part of the company's routine.

> "The internal team elaborated and implemented BSC using participative approach involving managers at all organizational levels who acted as promoting agents of the change. We conclude that the attributes of the innovation: relative advantage, ease of use and compatibility were the main influencers of the **adoption** of BSC." (Vaz Lopes, 2015, p. 131)

This thesis has examined these factors to establish whether these factors also held true in the Australian Healthcare sector, whether public or private.

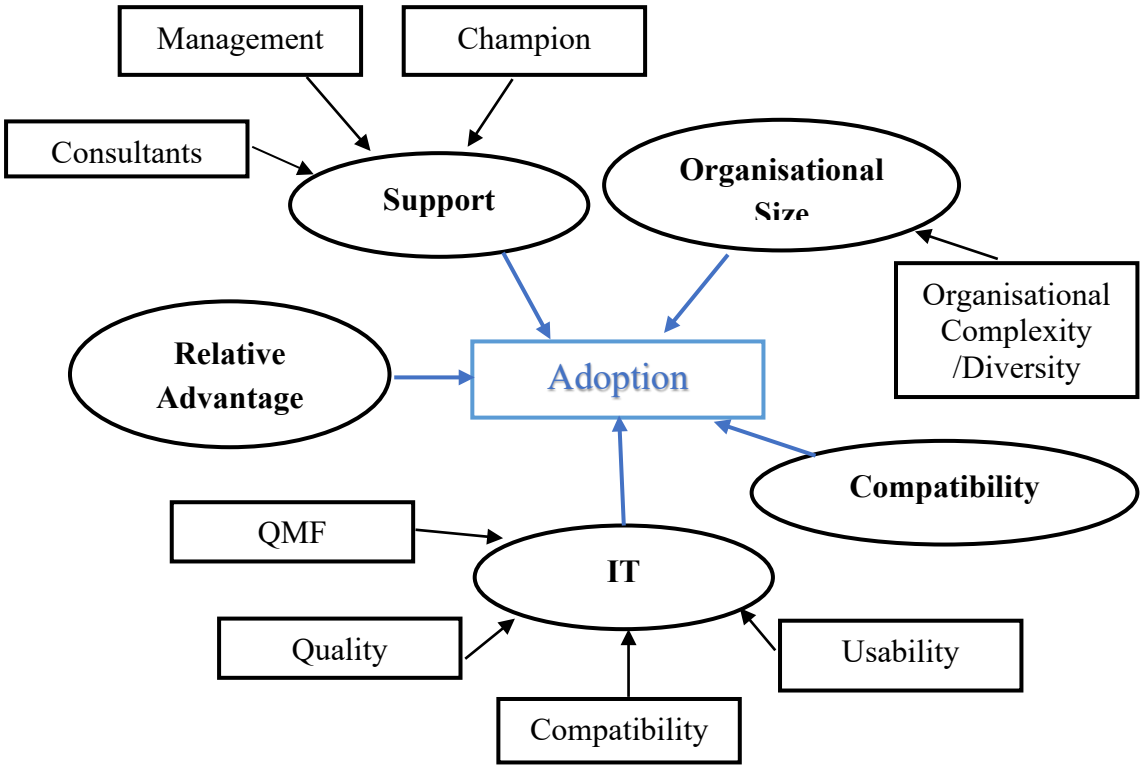
Hence based on the theoretical framework and reasons discussed in section 2.3 the following research question and BSC Adoption model (Model 1) was proposed for this study.

The BSC Adoption model (Model 1) Diagram 2.2 is on the following page (p. 40)

RQ1: What organisational, technological, and environmental factors have impacted the adoption of a balanced performance measurement and management system (BSC), within Australian healthcare organisations?

Diagram 2.2 BSC Adoption Model

BSC Adoption Model (Model 1)



The next section discusses each of the chosen adoption factors from the proposed BSC Adoption Model based on extant literature.

Organisational Factors affecting BSC Adoption

In this section, each of the individual chosen organisational factors from the model will be discussed as to their proposed impact on the BSC Adoption model.

2.4.1. Support

2.4.1.1. From Top Management

Top management support concerns the degree to which there is active promotion by upper level executives, for example, Chief Executive Officer and/or Chief Financial Officer, District Manager, for the new innovation. Top management support signals, within the organisation, the significance of the innovation (Brown et al., 2004). Premkumar and Potter (1995) noted that if the decision to adopt is made by lower level management, the level of risk undertaken by them is high. In contrast, if top management support the adoption of the innovation, then

the risk of the project is reduced. Also, access to resources will be increased and issues across organisational boundaries will also be easier to resolve if top management explicitly support the project (Brown et al., 2004 p. 336).

Prescott and Conger (1995) refer to a number of studies in the Information System innovations literature that have examined top management support in the adoption process. These studies have consistently found that this variable has a positive impact on innovation adoption. Brown et al. (2004) did not find this factor to be significant for ABC adoption, however they did find that it was associated with initial interest in ABC. This study postulates, that top management support is positively related to BSC adoption. Further, as noted earlier, it is expected that top management would not support a project unless they perceive that the relative advantages outweigh costs. Therefore, it is also proposed that top management support will be stronger where the perception of relative advantage is high.

2.4.1.2. From a Champion

Champion support, as defined in this study, concerns an individual within an organisation significantly promoting and driving the cause of the innovation (BSC). This individual would inform and educate senior managers and users about the innovation and create an awareness of the organisation's need for such an innovation (Premkumar & Potter, 1995). Given the vastness of a project like adopting a BSC, which to be effective impacts on all aspects and divisions and levels of an organisation, there is a great need for an internal champion to drive the project and facilitate communication within the organisation (Shields, 1995; Foster & Swenson, 1997, McGowan & Klammer, 1997). Several studies in the Information System innovation literature that have examined champion support in the adoption process have found support for the view that champion support is critical to the adoption of the innovation (Prescott and Conger, 1995). Brown et al. (2004) found an association between the support of an internal champion both at the initial interest stage and at the adoption stage for ABC. Consistent with this finding, it was anticipated that the internal champion support will have a large impact on the adoption of a BSC. It is also expected that the internal champion support will increase the organisations view of the perceived relative advantages. The internal champion will need to communicate these advantages to facilitate the BSC project.

2.4.1.3. From Consultants

Cohen (1999) states that, companies are increasingly using outside experts or consultants to help them solve their problems. Anderson (1995) found in her case site, that once the problem with the current costing system had been identified, the influence of external experts or consultants became an important factor in the adoption of the new system. Bjornenak (1997) examined the issue of consultants as innovation information sources and while he did not appraise statistically the use of consultants, he did find that all of the firms in his sample that had implemented ABC had used consultants.

Booth and Giacobbe (1998) contend that an association exists between active propagation of ABC by consultants and ABC adoption. Although they observed a degree of positive association for these variables, the association did not achieve a statistically significant threshold. The role of consultants at the early stages of adoption can be viewed as potentially similar to that of an internal champion. Consultants have the potential to alert the firm to the 'problem' (such as, lack of strategic focus, declining return on investment, goal incongruence) and then promote the 'solution' of a BSC. Conversely, those firms that have not considered a BSC would have had less exposure to organisational influences (champion, consultants) who promote the use of a BSC. As part of their self-promotion, it is likely consultants will try to 'sell' the product by highlighting not only its advantages, but also how easy it is to understand, and how it 'fits' with the firms' vision and strategy. Malmi (2001) found that supply-side forces played an important part in the adoption of the BSC in Finland. Kasurinen (2002) found that the primary drivers for adoption and usage of a BSC were the actions of consultants and the dissemination of the BSC information through books and seminars (fashion). Similar views are expressed by Madsen and Stenheim (2015), and Nørreklit (2003).

2.4.2. Organisational Size

Organisational size is arguably the one factor that has consistently been found, to affect the adoption of a wide range of innovations. A number of adoption studies (Otley, 2016; Chenhall 2003; Hoque & James, 2000; Krumwiede, 1998; Bjørnenak, 1997; Clarke, et al., 1997; Van Nguyen & Brooks, 1997) have found that the level of adoption is greater in larger organisations. Booth and Giacobbe (1998) found this relationship only at the initiation stage of interest in ABC, but no relationship for the later evaluation and adoption stages of their model.

There have been a number of diverse explanations given for these findings in the literature. Van Nguyen and Brooks (1997) argue that larger firms are more likely to have greater access to individuals with the knowledge to design and implement an innovation like ABC. There has also been suggestion that the more innovative the manager the more likely new innovations will be adopted and used (Wolfe, 1994). Also, the cost of implementing either ABC or a BSC will be extremely high, and larger organisations are more likely to have the economies of scale, enabling them to spread the cost across the whole organisation. Bjørnenak (1997) argues that larger firms have larger information fields (i.e., contacts and communication channels) and the necessary infrastructure, and therefore are more likely to adopt innovations.

Booth and Giacobbe (1998) reasoned that larger firms have more discretionary resources (such as personnel, computing facilities and time), hence are more inclined to adopt innovations like an Activity Based Costing system. This supports the resource-based view argument put forward earlier in this thesis. It would seem plausible then that organisational or strategic business unit size would also have an impact on BSC adoption, as found by Hoque and James (2000). Guilding's (1999) research also indicates that a positive relationship exists between company size and the company's accounting system sophistication (see also, Burns and Waterhouse, 1975; Merchant, 1981). Guilding provided strong support for the view that size is positively related to the greater use of competitor-focused accounting. Also pertinent is Khandwalla's (1972, 1977) finding that large firms are more diversified in product lines, employ mass production techniques, are more divisional and make greater use of sophisticated controls and environmental information gathering, for example, forecasting.

2.4.2.1. Organisational Complexity and Diversity

The early proponents of ABC claimed that high product diversity and complexity increased the potential costing distortions arising from traditional cost systems, hence the more diverse and complex the products, the greater the demand for a system like ABC or the BSC (Cooper and Kaplan, 1988; Cooper, 1988). Findings in the ABC literature with respect to this expectation are mixed. Bjornenak (1997) and Krumwiede (1998) found a positive relationship between the level of product diversity and complexity and ABC adoption. Van Nguyen and Brooks (1997) found no relationship and Clarke et al. (1997) found a negative association. This study argues that as diversity and complexity increase, there is a greater demand for more sophisticated information and control systems, and increased use of diverse measures. The BSC provides the

system for more diverse measures, both in terms of non-financial and subjective measures within different perspectives. Hence, the greater the SBU and/or product diversity/complexity, the more likely a firm is to adopt a BSC. Also, the SBU complexity will impact on the perceived need for a 'new system' to replace the existing one, and hence influence the perception of the relative advantage of a BSC. As Healthcare providers have many stakeholders to manage, we would expect this aspect of complexity to drive BSC adoption. This factor could also be associated with the size of the organisations and influence the impact of that factor as well.

2.4.3. Compatibility

Compatibility "is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters." (Rogers, 1995, p.223). High compatibility reduces uncertainty for the potential adopter because the adopter is able to place the innovation in context. This context is provided by the beliefs, values and past experiences of the potential adopters. As the innovation under study is not a technical one, this research will build on Roger's notion of past experience. Hence the researcher proposes that past experience with the BSC or techniques similar to the BSC will influence compatibility. As will past experience with the information technology necessary for a BSC. The researcher further postulates that if these beliefs and experiences are positive, then they are more likely to adopt a BSC.

As the BSC is an administrative innovation, the compatibility construct may well be under defined and needing further development in the exploratory interview phase. It could be that prior experience of manager's with BSC application is a more appropriate construct to investigate. Vaz Lopes (2015) found that compatibility affected BSC adoption, although his construct of compatibility is different to that used for this research.

Technological Factors affecting BSC Adoption

Other factors included in the model relate to the problems that the adoption of the innovation (BSC) would help to solve, and some technological issues that could influence the success of the adoption process. It is these factors that have commanded the attention of several investigations of Information System innovation, as well as in the ABC adoption literature (Hoque and James, 2000; Booth and Giacobbe, 1998; Bjørnenak , 1997; Clarke, et al., 1997;

Van Nguyen and Brooks, 1997). Factors examined in this research include Information Technology quality, compatibility, usability and quality management framework. Underlining this choice of factors was the idea that the more complex and diverse the organisation the greater the demand for Information Technology systems to achieve BSC implementation.

2.4.4. Information Technology

2.4.4.1. Quality

Information Technology quality has been found to be an important factor in the Information Technology literature (Bharadwaj, 2000) but has had mixed results in the ABC literature (Krumwiede, 1998). This study has included this as a factor, but it has been viewed slightly differently in this study and hence measured differently. The arguments for this adjustment to measurement flows from the resource-based view of the firm literature.

> "Prior literature on the impact of information technology (IT) quality on ABC implementation is conflicting. Managers with higher quality IT may feel better able to implement ABC than companies with less sophisticated IT systems because the costs of measurement are lower (Cooper 1988). On the other hand, managers who are generally satisfied with the information provided by the existing system may be reluctant to invest the necessary resources in ABC (Anderson 1995). Using an alternative measure of success, Anderson and Young (1999) find evidence that the quality of the information system is negatively related to management's evaluation of ABC's overall value. Thus, higher levels of IT quality may either encourage or discourage ABC adoption" (Krumwiede, 1998, p. 251).

2.4.4.2. Compatibility

Given the volume of data necessary to implement a BSC, it is expected that Information Technology Quality will influence the management's evaluation of adopting the BSC. Based on the resource-based view of the firm, it appears that the Information Technology issue is not so much about "quality" as about "compatibility". If the Information Technology resources already in place are collecting the necessary information for the implementation of a BSC, then the firm is more likely to adopt a BSC. Conversely it could be argued that if the system is already collecting the necessary data, then there is no need for a new technique like the BSC.

2.4.4.3. Usability

Alshamari (2016) found that systems' usability is one of the critical attributes of any system's quality. The Medical practitioners in Alshamari's research encountered usability difficulties while using the health information system like they did other IT systems. There are different usability factors, which are expected to influence systems' usability.

In Spatar et al., 2019 they found that usability was directly associated with the usefulness of the Electronic Health Record System, thus the more flexible and adaptable the system is the more useful it is perceived as being. Spatar et al., also found that adoption success did not solely depend on the technology itself, but also upon the users' abilities, knowledge and experience with the technology chosen. The easier the system is to use and understand, the more likely an organisation is to adopt the system.

This study also examined whether companies that have already employed other innovative techniques are more likely to employ the BSC, either because of their openness to new ideas or because of the compatibility of the BSC with these other techniques.

2.4.4.4. Quality Management Framework

The BSC has been examined in relation to a number of other management control techniques: Supply Chain Performance (Brewer et al., 2000); Just In Time inventory system (Clinton and Hsu, 1997); ABC and logistics strategy development and monitoring process (Liberatore et al., 1998); 'cost of quality' (Shepherd, 2002). Some studies have examined the role of non-financial performance measures in advanced technologies (Banker et al., 1993; Chenhall, 1997; and Perera et al., 1997). Based on the findings of these studies, it is intuitively appealing to suggest that the organisations most likely to adopt a BSC are those that already have complementary systems such as Quality Management Frameworks in place. Brown et al. (2001) suggested this factor would potentially have more impact on the implementation than the adoption stages. If these systems are seen to be interrelated and there is common data sharing, then Quality Management Framework existence could impact at the initial stages as well. This study contends that the prior existence of Quality Management Framework, which is demanded in the healthcare environment, will be a factor affecting the likelihood of BSC adoption and implementation.

2.4.5. Perceived relative advantage

Relative advantage was chosen not only because it was an important factor in both the Information System and ABC innovations literature, but because of the costs vs. benefits involved in adopting a BSC.

There is a large body of literature that examines the association between perceived relative advantage and innovation adoption. Relative advantage is defined by Kwon et al. (1987) as

> "…the degree to which an innovation is perceived as providing greater organisational benefits than other innovations or the status quo. These cost benefits may reflect economic legitimacy and or social or political legitimacy" (p. 237).

Rogers (1995) suggests it is "…the degree to which an innovation is perceived as better than the idea it replaces". (p. 212). It will be this aspect that is pursued in this study.

Both the Information System and ABC innovation literature have explored perceived relative advantage in depth, and both have reported a positive association between adoption and perceived relative advantage (Tornatzky and Klien, 1982; Kwon and Zmud, 1987; Wolfe, 1994; Anderson, 1995; and Prescott and Conger, 1995). Both the academic and practitioner literatures have made consistent claims about the BSC's advantages, uses and its ability to create improved profitability (Kaplan & Norton, 1992, 1993, 1996 a-c, 2001 a & b; Kariozen, W., 2012), therefore a strong prima facie case exists, that adoption of a BSC will be influenced by its perceived relative advantages. It seems logical that organisations will initiate interest in and adopt those innovations that they perceive as advantageous, and likewise organisations will not consider (or consider and then reject) a BSC if they perceive that there is no relative advantage of adopting (Cifalino & Baraldi, 2009). The assumption is that managers will use a cost/benefit approach. Therefore, consistent with both the Information System and ABC adoption literature, it is expected that BSC adoption will be impacted by the perceived relative advantage of a BSC.

The next section outlines the theory behind the characteristics and culture of organisations and the healthcare sector, on the adoption and implementation of the BSC. The discussion begins with the fact that the BSC form differs for the public and private sector, then discusses the diffusion of MCS and the BSC literature based on four themes; use and usefulness, behavioural outcomes, organisational outcomes, and sociological and political outcomes.

2.5. Theoretical Framework for Diffusion of MCS & BSC in the Public Sector and Healthcare Sector (Stage 2 Conceptual Framework Characteristics/culture)

Having established the BSC Adoption Model 1 in section 2.4 as a generic model for all organisations, this section will discuss the relevant research published in the area of management accounting applications, MCS and BSC and their diffusion within the public and healthcare sectors to identify any characteristics, or organisational culture affects that will impact the BSC adoption and/or implementation. As illustrated in the conceptual framework the success of BSC implementation is impacted by both Model 1 BSC Adoption Model and Model 2 Critical Success Factors (discussed later in this chapter, section 2.6) but it is ultimately driven by organisational culture. The following discussion will show that there are gaps in the literature, and more attention is being called for, towards the area of successful BSC diffusion. It will also illustrate where this study sits in relation to the current research and how this study extends this research and has led to the development of the second and third research questions.

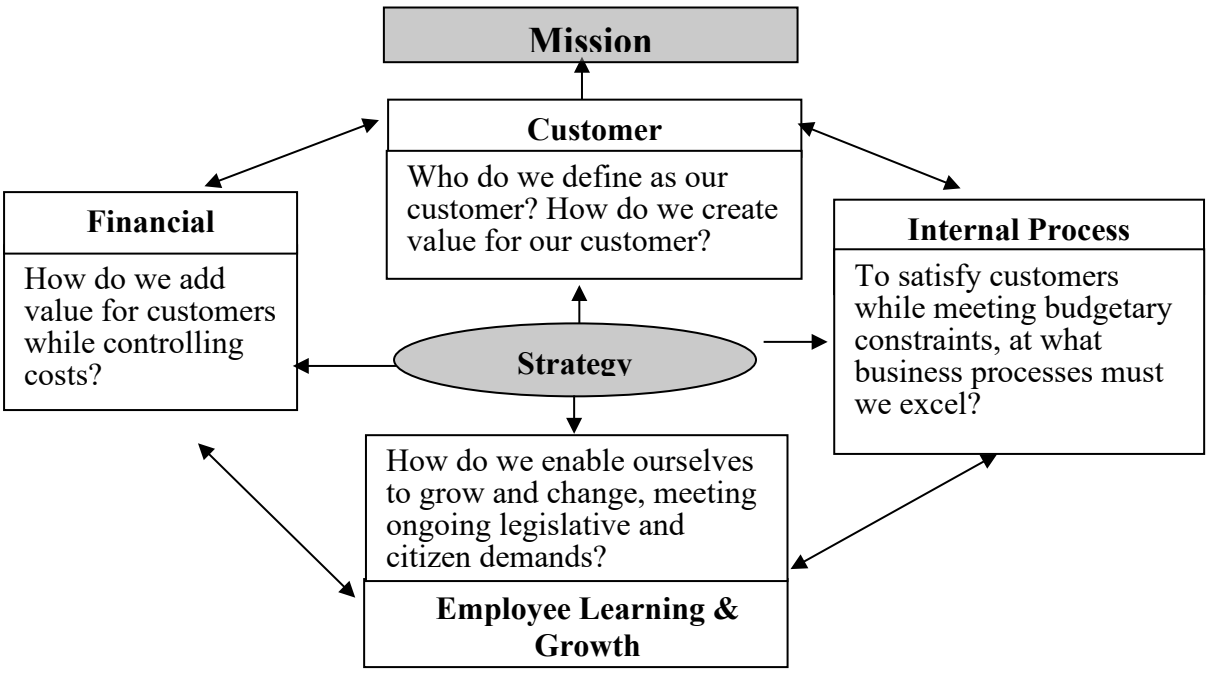
Public/Non-Profit Sector BSC Framework

As most of the healthcare organisations studied were to be selected from the public sector, when creating the BSC Adoption model and the Critical Success Factor model, the researcher kept in mind that most of the adoption theory to date had been from the private/profit orientated organisations. Hence a brief discussion of the important changes between the public and private form of the BSC is necessary, at this stage.

Niven (2002) states that government sector performance can be improved and tools like the BSC are key weapons in the arsenal of change. Public and non-profit organisations generally seek to achieve aspirational missions aimed at improving society. Also, the people who work for the public and not-for-profit sectors do not typically do so for financial rewards. As mission-focused organisations, they must change the design of the BSC, elevating the role of the mission and customers, and reducing the influence of financial indicators.

Acceptance and use of the BSC within the public sector continues to grow at a steady pace, as it appears public sector organisations can extract similar BSC benefits to those evident in the private sector. But the BSC framework was originally designed for profit seeking organisations, therefore it needs to be modified for the public sector to secure the full benefits of BSC application. Niven (2002) suggested the framework outlined in diagram 2.3.

Diagram 2.3 Public/ Non-Profit Sector BSC Framework



This diagram appears as Exhibit 13.1 p. 297 of Niven (2002)

Strategy remains at the core of the scorecard regardless of what type of organisation is implementing the technique. Niven (2002, p. 297) states that:

> "While many attempt to develop statements of strategy, they amount to little more than detailed lists of programs and initiatives used to secure dollars from legislative funding bodies. As a result, early governmental Scorecard efforts focused primarily on internal measures of efficiency and quality with little regard to the … goal of serving citizens."

Public sector organisations need to supplement the goals of strategy with higher-level objectives describing "why it is they exist, and ultimately what they hope to achieve." (Niven, 2002, p.298). 'Reducing crime' or 'providing quality healthcare to the community' are examples of goals but not strategies. These goals are the organisations missions that provide the motivating force for action; hence mission is at the top of the scorecard.

Another distinction to the private sector scorecard is that flowing from the mission is a focus on the organisation's customers, not their financial stakeholders. The organisation must determine who it aims to serve and how their requirements can best be met. But this question of 'who is the customer' is a difficult and perplexing issue for the public sector as different groups design the service, benefit from the service and pay for the service. Each group of

customers identified can result in different measures appearing in the other three perspectives of the scorecard. This research suggests that we add another dimension for stakeholders.

Financial measures should be seen as either enablers of customer success or constraints within which they must operate. Scorecard practitioners must teach reticent managers that financial measures are not necessarily at odds with their non-financial goals but are intended to balance the goal of serving the customers with fiscal accountability and responsibility. The latter is becoming more crucial with the increased introduction of legislation requiring accountability within the public sector (Decarmer, et al., 2008; Spekle & Verbeeten, 2013; Zastempowski, 2015).

Internal process measures should derive from the value propositions reflected in the customer perspective. Niven (2002) notes that 'a legacy of government quality programs has been the reliance on measures of internal efficiency and quality' with little concern about the impact on customer performance yardsticks or ultimately on their mission. Internal process measures may also be generated from the increasing trend of government organisations to contract with third parties and create partnerships with other providers to meet customer's needs.

To meet the objectives established in the customer, financial and internal process perspectives, government organisations need to develop metrics in the employee learning and growth area that will enable positive outcomes.

Government organisations generally have little problem in developing measures for the learning and growth perspective, but they need to be careful that this perspective does not become simply a place for every human resource initiative they have. New measures need to be developed that track the effectiveness of training programs, examine and attempt to fill the skill gaps, establish better information flows, and monitor the organisation's climate/culture. Pasaribu et al., (2016) concluded the learning and growth perspective was considered the most important in the public sector, but they were still using the financial perspective as highest outcome.

Niven (2002) notes that cascading is vital in the private sector, but it may be even more critical in the public sector application of the BSC. One of the benefits of cascading is the alignment that is creates from top level to bottom of an organisation. Given the large level

of interdependency existing within most public sector organisations, alignment becomes a necessity for the scorecard's success. Customers within the government system rarely receive one-stop shopping, they will avail themselves of many different services that it offers. They will acquire assistance from a variety of independent, yet closely related program providers. For example, an unemployed person may need to deal with Centrelink, and the department of housing, and maybe other government run bodies. If each provider documented their contribution in the form of a performance measure on their BSC. Then these measures fed into a combined BSC, then the cumulative action of the program providers would move the organisation (agency) closer to achieving its overall mission.

Management Control System Literature

As the BSC forms part of a broader system that is generally referred to as a management control system(s), the following briefly identifies the relevant MCS literature to this study, focussing specifically on contingency oriented research.

Chenhall (2003) noted that the definition of management control systems (MCS)

> "… has evolved over the years from one focusing on the provision of more formal, financially quantifiable information to assist managerial decision making to one that embraces a much broader scope of information. This includes external information related to markets, customers, competitors, non-financial information related to production processes, predictive information and a broad array of decision support mechanisms, and informal personal and social controls" (p. 129).

Chenhall (2003) notes that contingency-based research has focused on a variety of aspects of MCS. These include dimensions of budgeting such as participation, importance of meeting budgets, formality of communications and systems sophistication, links to reward systems (Merchant, 1981; Burns & Waterhouse, 1975), budget slack (Van der Stede, 2000; Dunk, 1993; Merchant, 1985; see Dunk & Nouri, 1998 for a review), post completion audits (Chenhall & Morris, 1993; Smith, 1993) and variance analysis (Emsley, 2000). Examples of contemporary innovations in MCS include ABC/ABM (Anderson & Young, 1999; Gosselin, 1997), non-financial performance measures (see Ittner & Larcker, 1998 for a review), economic value analysis (Biddle, et al., 1998) and the BSC. At a more general level, studies have considered sophistication of controls (Khandwalla, 1972), reliance on accounting performance measures

(Imoisili, 1989; Brownell, 1982; 1987; Hirst, 1981; Otley, 1978; Hopwood, 1972, 1974; see Hartmann, 2000 for a review), dimensions of information such as scope, timeliness and aggregations (Chenhall & Morris, 1986; Gordon & Narayanan, 1984; Larcker, 1981), sophisticated capital budgeting (Haka, 1987; Larcker, 1983), cost consciousness (Shields & Young, 1994), competitor focused accounting (Guilding, 1999), strategic interactive controls and diagnostic controls (Simons, 1995).

According to Chenhall (2003), MCS researchers are therefore faced with the decision

> "… (about) whether to build on the existing area of study such as …, or identify emerging aspects of MCS, such as balanced scorecards or target costing, and investigating the setting within which they may be most beneficial. …. Studying the role of novel MCS practices within contemporary settings is necessary to ensure that the MCS research is relevant. There is a pressing need for studies in situations in which contemporary MCS may be best suited" (p. 130).

In this research, an aspect of MCS, the BSC, was chosen. The settings within which the BSC is most beneficial and factors affecting its adoption were investigated.

In the late 1990's, research was published identifying contingencies surrounding the design and implementation of ABC/ABM (Anderson and Young, 1999; Clarke, et al., 1997; Booth and Giacobbe, 1998, Krumwiede, 1998). Very little of this type of research had been conducted using the BSC. Hence in the early 2000's there was a call for more contingency research on the BSC, and on the broad array of non-financial performance indicators used. Also for more research into service and not-for-profit organisations as these entities have become increasingly important within most economies (Chenhall, 2003). Chenhall commented that 'ín studying these controls within their contemporary settings, it is also important to develop knowledge in ways to ensure coherence in the study of elements of MCS and contextual variables' (p. 130). Pasaeibu et al. (2016), published a review of performance measures used in the BSC in the public sector between 2010-2015. Pasaeibu et al. concluded firstly that most public sector organisations were still using the financial perspective as highest outcome, even though secondly the learning and growth perspective was considered the most important. There have been repeated calls for replication studies to enhance the validity and reliability of findings and to provide a stronger base to move forward by way of model development (Lindsay, 1995; Chenhall, 2003; Singh & Sethi, 2017).

The healthcare context was chosen because of its unique characteristics, especially its environmental characteristics. Over the past two decades healthcare expenditure has increased in all Organisation for Economic Cooperation and Development (OECD) nations. In most OECD countries the healthcare sector is now the largest service industry (OECD Health Data). This continued demand has been brought on by many factors (Abernethy & Stoelwinder, 1990; Lapsley, 1991, 1996: Lapsley & Wright 2004; Preston, 1992). Two major factors are firstly, the continual advances in medical knowledge and treatment philosophies which have extended the array of healthcare treatments available, leading to higher life expectations and the consequent higher demand on healthcare resources. Secondly, demographic patterns common to many of the developed nations, the post-world war 'baby boomers', and the slowing birth rates since the 1960s has led to an ageing of the population and a reduced population base to fund the increasing demand on these services (Gallagher, 2018, p. 1).

Consequently, there have been many reforms in the healthcare sectors within the major economies, particularly in the area of finance. These reforms have included the implementation of 'business models' of performance management. These business models are drawn from a variety of management techniques to communicate the national priorities to the service providers (Bobe et al., 2017; Dimitropoulos, 2017; Zastempowski, 2015; Spekle et al., 2013; Rodgers, 2011; Timoshenko & Adhikari,, 2009; Knutsson et al., 2008; Mucciarone & Neilson, 2008; Landrum & Baker, 2004; Smith, 2002; Hoque & Moll, 2001; Van Peursem et al., 1995).

One of the business models increasingly being implemented in the context of healthcare organisations is the BSC (Porebski, 2013; Aidemark, 2001; Modell, 2004; Voelker et al., 2001; Zelman et al., 2003; Gurd, & Gao, 2008). Chow et al. (1998) contends, that given the unprecedented levels of change that the healthcare organisations are facing in their operating and institutional environments, that the BSC is a powerful tool by which to energise and focus their organisation's management system. Aidemark (2001) provided empirical evidence that suggested that the BSC was viewed favourably within the healthcare organisations as it gave a renewed visibility to non-financial, patient related and process outcomes. Dimitropoulos, 2017 stated the BSC gave advantage in terms of enhanced stakeholder management and preservation within highly volatile and competitive economic environments. (p. 11).

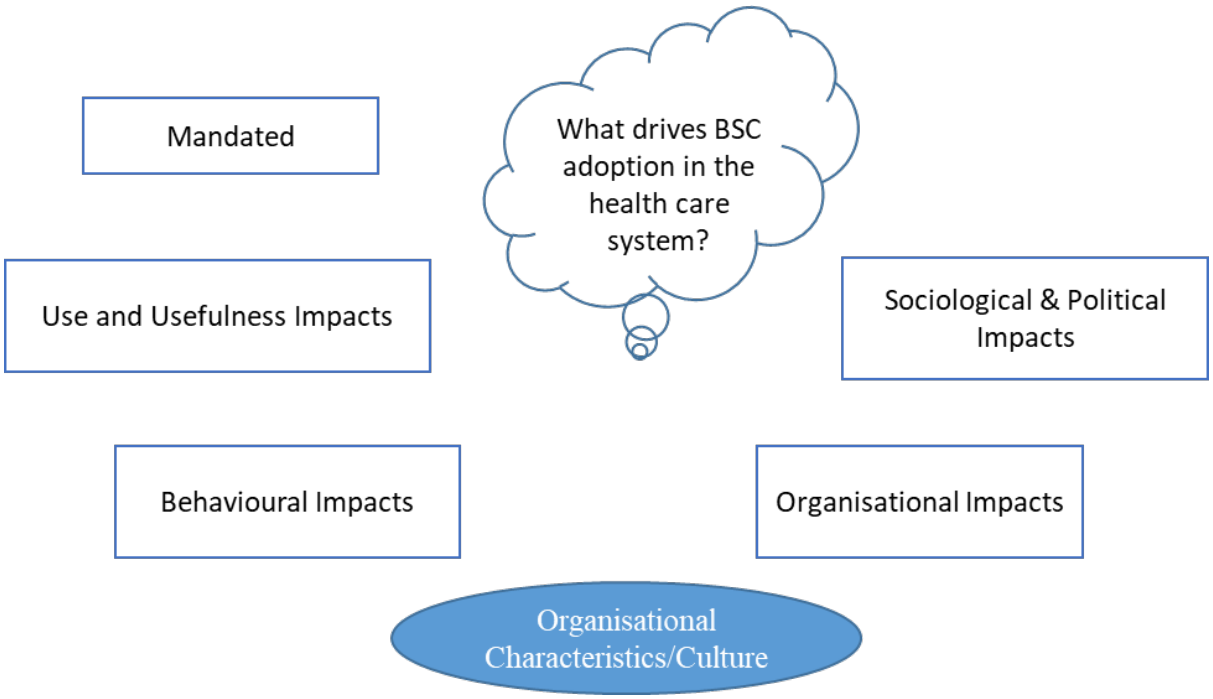
This research can be seen in the context of Chenhall's (2003) commentary. Firstly, an emerging aspect of MCS is being examined where the use of the BSC is the unit of analysis.

Secondly, the service and not-for-profit organisations are the central organisations being studied. Thirdly, BSC adoption is being observed within its contemporary setting. Fourthly, new contextual variables that have not yet been examined in MCS were developed and analysed from thematic sets identified by using NVivo. Finally, it replicates some studies to enhance the credibility and reliability of those findings and hence provide a stronger base for model development. (refer to RQ 1 (p. 39) and RQ 3a & 3b (p. 74)).

2.5.1. Adoption Drivers – Mandated, Superior System, Legitimisation

As the conceptual framework (refer Diagram 2.1, p. 26) illustrates this thesis is researching what drives and affects BSC adoption in healthcare organisations. This section addresses what drives the adoption decision and sections 2.5.2 - 2.5.5 address the affects/impacts of the BSC. The organisations need to establish reasons for choosing the BSC over any other performance measurement and/or management system. Some organisations will have the BSC mandated upon them but for those organisations that are free to choose the BSC the following literature identifies some of the concepts that would have driven their decision.

Diagram 2.4 Adoption Drivers



The research question: 'Do motives affect the development and use of the BSC?' was examined by van Veen-Dirks and Lillis (2018). Van Veen-Dirks and Lillis' results provided evidence that economic motives for adoption of the BSC has a positive effect on its development. When

it came to legitimacy motives, the researchers found that mimetic isomorphism had a negative effect on the use of the BSC, but normative isomorphism had a positive effect. Lacey (2008), Lacey et al. (2012) also found some support for the 'legitimacy' argument.

Kasurinen (2002) concluded that there appears to be no apparent reason why companies use a BSC. During the interviews the researcher found suggestions that the primary drivers for adoption and usage of a BSC were the actions of consultants and the dissemination of the BSC information through seminars and books leading to a management 'fashion'. Similar views are expressed by Madsen and Stenheim (2015), and Nørreklit (2003).

To be adopted the BSC would need to be seen to be useful before and organisation will adopt the BSC. As the MCS literature suggests the BSC might also be adopted because of perceived advantages in terms of financial, organisational, behavioural, sociological, or political outcomes.

Hence the following section will outline the MCS literature separated into issues related to the use or usefulness of the MCS, and behavioural, organisational and sociological outcomes. There has also been an implied connection between these outcomes. If the MCS is found to be useful, it is likely to be used, thereby providing satisfaction to individuals who can then approach their task with enhanced information. The enhanced information will lead to better decision making and as a consequence lead to increased organisational performance. The problem is that there is no compelling evidence to suggest that such links exist. The question of the existence of these links is examined in research question four of this study (refer p. 85).

2.5.2. Use and Usefulness of the BSC in the Healthcare Sector

In terms of use or usefulness, researchers of MCS have considered the extent to which the system provides information (Mia & Chenhall, 1994), the degree of use (Abernethy & Guthrie, 1994; Anderson & Young, 1999; Foster & Swenson, 1997; Guilding, 1999), the usefulness of the information (Chenhall & Morris, 1986; Shields, 1995); or the beneficial nature of the MCS (Chenhall & Langfield-Smith, 1998c); the importance in making operational decisions (Bouwens & Abernethy, 2000); importance to product development (Davila, 2000), whether they have been helpful to the organisation (Guilding, 1999), and satisfaction with the systems (Burns & Waterhouse, 1975). Northcott and Taulapapa (2012), studied the use of the BSC as a performance management tool in the New Zealand Public Sector, by examining the user's

perception of the key challenges in implementing the BSC. The challenges identified were modifying the BSC dimensions; designing qualitative outcome measures; identifying the 'customer'; achieving a multi-stakeholder approach and mapping causal relations. A single longitudinal study of the use of the BSC in a public sector organisation was conducted by Greatbanks and Tapp (2007), which also outlined the potential benefits and pitfalls of the BSC.

Abernethy and Stoelwinder (1991) suggest that the implementation of effective formal management control systems such as budgeting in these organisations requires the recognition that professionals in managerial positions may not have the necessary orientation towards these systems. The implementation of these systems may require, therefore, changes in the socialisation and education of professionals, and/or the implementation of control strategies which match the professional model of control. Further research is required in this setting based on a broader, more dynamic and integrated control system framework which is not narrowly focused on accounting control. The importance of such frameworks has been well recognised (Hopwood, 1972, 1974; Otley, 1980; Flamholtz, 1983; Merchant, 1985). This lack of orientation by management could impact on both the choice to adopt that BSC and on its composition, therefore its effectiveness.

The following discussion relates to the literature about the BSC and healthcare organisations specifically. To date it has mainly revolved around describing how a BSC could be applied in a healthcare provider organisation or a case study where the BSC has been implemented in a particular organisation (Bobe et al., 2017; Porebski, 2013; Wicks et al., 2007; Gumbus et al., 2003; Inamdar and Kaplan, 2002; Oliveria, 2001; Forgione, 1997; Pink et al., 2001). These articles describe what could/has been included in a BSC within the healthcare sector, based on the premise of 'usefulness'. This idea also links to the relative advantage factor in Model 1.

Establishing the reason for adoption is an important step in the framework. Since 2000, there are a growing number of articles in the healthcare literature about using the BSC and dashboards to improve performance (Cleverley & Cleverley, 2005; Wyatt, 2004). Aidemark (2001) found that the BSC was seen to reduce both the ambiguity of performance evaluation and the goal incongruence between parties in the organisation he studied. In Goodspeed (2003) thesis he found: (a) a significant increase in the employees' understanding of the organisation's strategy from pre to post-balanced scorecard implementation; (b) a significant increase in the

workforces' understanding about the hospitals' strategic plan over time; (c) a significant positive shift in employees' ability to link resources to organisational strategy; (d) a significant increase in employee's ability to link compensation, strategy and the budget; and (e) a significant increase in the actual amount of time that the executive management team members spent discussing strategy from pre to post-balanced scorecard implementation. This supports the argument that for the BSC to be adopted it has to have significant relative advantage over its other performance measurement systems.

In Chen et al. (2006) the BSC was found to be effective for identifying underlying existing problems and identifying opportunities for improvements. The BSC also revealed the hospitals' contribution to performance improvement of each of the country's (China & Japan) total health system. Yang and Tung (2006) examined the causal relationships among BSC measures within a Public Hospital system in Taiwan.

In 2009 Cifalino & Baraldi, examined the motives and rationales for adopting a Performance Management System in a Health Care Organisation. The findings, similar to Lawson et al. (2003), suggested that the Performance Management System should reflect the multiplicity of stakeholders in public organisations, in order to reconcile external legitimacy and organisational implementation of Performance Management System for measurement and management purposes. The research showed that supporting clinical governance predominated when the organisational design was based on a functional criterion. But the need of supporting efficiency predominated when the organisation design was hierarchical. The findings also established that in all cases the need for developing an external accountability to institutional stakeholders was a motivation for adoption of the BSC. The research suggests that the primary care/mental health divisional Performance Management Systems were in response to external pressures (coercive isomorphism). A participative change process, based on training, combined with informal socialisation and feedback mechanisms, lead to the acceptance of the Performance Management System that was grounded on consensus building. This research raises the question of the importance of the process of implementation of the BSC, potentially being more critical to success than the reasons for adoption of the BSC.

Pineno (2002) developed an incremental approach for decision-making by formulating a specific BSC model with an index of financial and non-financial measures. It was hoped that this

approach may prove to be useful in evaluating the existence of causality relationships between different objective and subjective measures to be included within the BSC. McCracken et al. (2001) undertook an exploratory comparison of objective and subjective methods used for measuring organisational performance in the hospital sector. McCracken et al. concluded that the availability of valid subjective measures is critical to healthcare researchers because organisations are more willing to provide subjective performance data than objective performance data. This is an area for future studies. The main focus in Porebski (2013) paper was based on the selection of the objectives for health service in a Polish hospital; and the methods and tools required to support the implementation of the BSC in accordance with the idea of sustainable development. One of the conclusions by Porebski (2013) was that,

> "using the system of measurement and assessment of hospitals' achievements with the BSC supplemented with the DEA method of effectiveness assessment, … should lead to improved effectiveness of using the resources that are at their disposal" (p. 533)

This research suggests that the BSC when used as a management tool should led to improved effectiveness.

Yap et al. (2005) examined the differences between a system-level scorecard and a hospital-specific scorecard. It was noted that the hospital specific scorecards used quite different measures and were more likely to be used by larger hospitals. This idea of there being a non-prescription remedy for hospitals is also discussed by Barden (2004). Evidence has been provided that senior management tend to rely on the common measures rather than the unique when judging performance (Lipe & Salterio 2000).

Hoque (2014) summarizes the literature in this area of adoption and use as follows: ''According to Kaplan and Norton (1996), the purpose of implementing the balanced scorecard is to expand the set of measures managers use in decision-making'' (p. 44). Other reasons found for adopting the BSC in the literature Hoque (2014) reviewed included improving strategic communication, aligning goals and strategies, and perceived legitimacy with external stakeholders. Hoque (2014) states that much of the work on usage of the BSC is descriptive, with very little theory building on adoption and usage. This provides strong motivation and reasons for the research in this thesis.

For the BSC to be useful, the choice of measures becomes an important step in the implementation process. Wicks et al. (2007) noted that although the BSC is an improvement over using financial measures only:

> "it has three conceptual limitations that are especially problematic for evaluating healthcare organizations: (1) it underemphasizes the employee perspective; (2) it is founded on a control-based management philosophy; and (3) it emphasizes making trade-offs" (p. 309).

To address these limitations, Wicks et al. (2007) proposed using the Competing Values Framework, a theoretically grounded, comprehensive approach to understanding and improving organisational and managerial performance by focusing on four action imperatives: competing, controlling, collaborating, and creating. The Competing Values Framework looks for ways to satisfy clients and employees while still addressing financial needs and opportunities for growth. The Competing Values Framework if used to assess both the culture of the organisation and the competencies of managers, might provide a link between strategy and implementation.

Further research in the area of the BSC and hospitals includes the following. Pieper (2005) wrote about 'how to strategically manage with scorecards'. Radnor and Lovell (2003a) took a wide view and defined and described performance measurement/management systems in the wider context before focusing on the BSC within the National Health Service. Patel et al., (2008) used Structural equation modelling to construct a causal-loop diagram showing cause and effect relationships between the 16 common performance indicators in the UK National Health Services across two years. Each of these areas of research supports the idea that the BSC when appropriate measures are chosen, is a valuable management tool to utilise.

Salterio (2012) when reviewing relevant literature, found that the dominant stream on incentives is that the evidence shows a ''common measures bias.' Salterio (2012) found that the "common measures bias" leads the scorecard to be unbalanced, with managers focusing more on the common measurements, such as financial data, to rate and reward employees. This led to the more qualitative and non-traditional aspects of the BSC being underutilized. Humphreys and Trotman (2011) found that common measures bias can be eliminated if strategy information is provided and all measures are strategically linked. Cheng and

Humphreys (2012) found that strategic uncertainty affects the number of BSC information points that are being used. Ballantine et al., (1998) took a service perspective on public healthcare and used two case studies from the UK and Sweden, to compared and contrasted performance measurement and management practices. The researchers noted the difficulty of finding cause and effect relationships.

2.5.3. Behavioural Impacts of the BSC in Healthcare

The second theme in the MCS literature is behavioural impacts/outcomes, this research has examined issues such as the effects of MCS on job satisfaction (Banker et al., 1993; Brownell, 1982: Chenhall & Morris, 1986). Numerous studies have examined the effect of MCS on job-related tension or stress (Brownell & Hirst, 1986; Hirst, 1983; Hopwood, 1972; Shields, Deng, & Kato, 2000). Unlike job satisfaction, stress appears to be more closely related to the nature of the MCS and is implicated in associations with performance (Shields et al., 2000). Greatbanks and Tapp (2007) found that the use of the scorecard enabled employees to clearly understand their role and hence focus on the performance related measures that supported the organisation's strategy. This clarity of role appeared to have a positive influence on achieving the business plan of the organisation, particularly in the delivery of customer service.

deWaal (2003) identified 18 individual behavioural factors that were important to the successful implementation of a performance measurement system. The researcher also found that the 'use stage' in a systems implementation project has to be performed well for the Performance Management System to become used regularly. Errami and Guehair (2018) explored the factors that increase the likelihood of a firm adopting the BSC. The reported results showed the notable positive influence was the manager's innovativeness. In Banker et al. (2004, 2011) they examined the judgemental effects of strategy maps in BSC performance evaluations. The findings were that performance evaluation decisions are 'more consistent with the achievement of strategic objectives when participants were provided with a strategy map' (Banker et al., 2011, p. 295).

Within the healthcare literature, the other reason that organisations have adopted the BSC is to create positive behavioural outcomes e.g. change in culture (Kren & Liao, 1988). Much of the empirical analyses examining the relationships between contextual variables and the design of organisation control systems have been based on Simon's (1957) original view of the

'administratively rational man' and the nature of his organisation (Argyris, 1964). Simon recognised that decision-making in large organisations is complex and that mechanisms are necessary to control and manage these complexities. Argyris (1964) argues organisations adopt different control strategies to guide mankind towards rational behaviour. In this context behaviour is considered rational if it strives to achieve espoused organisational goals. Many of the hypotheses that had been developed in both organisation and management control literature have been based on the premise that individuals will design organisation structures or control systems to match the organisation context and the better the match, the more effectively the organisation will perform (Merchant & Simons, 1986; Kren & Liao, 1988). Inherent in these hypotheses is the assumption of the existence of a unifying set of organisational goals and that individual behaviour can be directed towards the achievement of these goals (Otley, 1980). (Refer Abernethy & Stoelwinder (1991)). Kren and Liao (1988) argue that empirical accounting research has generally focused on the motivational effects of participation. This research will also be based on the premises of a rational man and that individual behaviour can be modified towards organisational goals.

Voelker et al. (2001) case study research, showed how a BSC could be implemented in the healthcare environment. Voelker et al. (2001) noted that the implementation of a BSC requires the support and commitment of the entire senior management team. Implementing a BSC requires long-term commitment, critical thought and the challenging of existing assumptions, creativity, teamwork, and open communication. To be successful, especially in the healthcare sector, the BSC will require the long-term commitment characteristic of other major organisational changes (Voelker et al., 2001, p.23). The conclusions in Voelker et al. (2001) re senior management support, long term commitment and communication were examined as part of the adoption model in research question one of this study.

Chow-Chua and Goh (2002) through the use of a case study developed a framework for evaluating performance and quality improvement in hospitals. Chow-Chua and Goh (2002) stated that:

> "… based on the research ... on quality improvement and performance measurement of hospitals and the healthcare sector, there appears to be a need to combine the various models and approaches to performance and quality improvement" (p. 54).

This study will not pursue this theme, but it could lead to future research projects.

Theoretical frameworks developed by Gordon and Miller (1976), Waterhouse and Tiessen (1978), Bandury and Nahapiet (1979), Ginzberg (1980), and Macintosh (1981); confirm Thompson's (1967) conclusions that "uncertainty appears as the fundamental problem for complex organisations and coping with uncertainty is the essence of the administrative process..." (p. 159). Coping with uncertainty has directed management accounting contingency researcher's attention towards the design parameters of the management information systems as well as the relative importance of financial control strategies *vis a vis* other control mechanisms (Gordon & Narayannan, 1984; Chenhall & Morris, 1986; Macintosh & Daft, 1987; Merchant, 1985; Hopwood, 1972; Otley, 1978). Budgeting is one strategy used by organisations to "influence the probability that people will behave in ways which lead to the attainment of organisational objectives" (Flamholtz, 1983, p.154). Abernethy & Stoelwinder (1991) developed a contingency model to examine the influence of task uncertainty and system goal orientation on the effective use of budgeting. The results confirm the importance of both variables on performance. The 'fit' between budgeting, task uncertainty and system orientation resulted in improved performance. These themes of improving performance could be included in future research beyond what has been covered in this thesis.

2.5.4. Organisational Impacts of the BSC in Healthcare

The third theme of MCS literature, the organisational impacts/outcomes stream of contingency based research, has been dominated by self-assessment processes where individuals provide an indication of their performance or the organisational unit's performance. The issue of validity of self-assessment is often raised as a concern (Chenhall, 2003, p. 134). To counter this criticism of self-assessment, superiors' performance ratings of the respondents have been included in many studies. van der Meer-Kooistra and Vosselman (2004) examined the motives for adopting the BSC, the decision-making process around its adoption, and use of the BSC as a means to control performance. van der Meer-Kooistra and Vosselman (2004) also examined the BSC's functioning in light of the organisation's strategy, and the influence of other control instruments used in the organisations assuming they were linked to solving the organisation's problems.

Contingency based studies have examined MCS as both a dependent and independent variable. To examine fit between the MCS and context, some commentators have claimed that the outcome variables should be some dimension of desired organisational managerial

performance (Otley, 1980; Otley & Wilkinson, 1988). In most studies with MCS as the outcome variable, it is implied that the associations between context and MCS reflect equilibrium conditions, due to the survival of the fittest. The researchers note that this approach is justified by either assuming that rational managers are unlikely to adopt or use MCS that do not assist in enhancing performance or alternatively that managers may adopt MCS for institutional or political reasons that may be inconsistent with rational economic reasons (Chenhall, 2003, p. 134). Chenhall (2003) notes that if disequilibrium conditions are assumed, then it may be useful for contingency based studies to first establish adoption and use of MCS, then to examine how they are used to enhance decision quality and finally investigate the links with organisational performance (p. 135). This first approach will be undertaken in this study.

Organisational outcomes have also been a major theme in the BSC healthcare research. Chan and Seaman (2008) surveyed Chief Executive Officers and clinical unit managers regarding their perceptions on their organisation's strategy, autonomy structure, Performance Management System, and organisational performance. The results indicate that 'patient satisfaction is the primary and most significant perspective of the depicted balanced scorecard in organisational performance. Patient satisfaction and research criteria, … are the significant perspectives of a balanced scorecard in an organization's Performance Management System, which are linked to strategy, autonomy structure, and organizational performance' (Chan & Seaman, 2008, p. 151). Chan and Seaman (2008) also found that 'strategy on service innovation has a negative impact on the organizational outcome of patient satisfaction' (p. 151). Possible explanations for this impact were: uncertainty from continuous development, organisational change in pursuing service innovation and cost-cutting measures in response to fiscal constraints.

Gupta and Salter (2008) used actor-network theory and neo-institutional theory, to develop and test a model of the relationship between organisational culture and the use of the BSC. They found that usage of the BSC is dependent on organisational culture.

> "Organisations that are future and performance oriented with a high level of power distance have higher levels of BSC usage. This usage is found to be lower in organisations that are collectivist and uncertainty avoidant" (Gupta & Salter, 2018, p. 115).

Chang et al., 2008 examined performance improvement in a large hospital in Taiwan after implementing the BSC. They noted that the successful development and implementation of the BSC was most likely due to firstly, right from the beginning the BSC executive team included the Board of Directors along with senior management personnel were involved. Secondly after two years of implementation they successfully launched departmental BSCs and linked them to the budget planning process.

Lee and Yang (2011) using Taiwanese firms on the stock exchange, examined the effect of organisation structure and competition on the design of performance measurement systems and their joint effects on performance. They investigated the design of performance measurement systems from two dimensions: the use of integrated measures related to the four perspectives of the balanced scorecard (BSC) and the stage of development of performance management systems. The results indicate that organisational structure is significantly associated with the design of performance management systems. Compared to mechanistic organisations, organic organisations make greater use of integrated measures and the higher developmental stages of performance management systems. Lee and Yang (2011) also found partial support for the presence of joint effects on performance involving organisational structure, competition, and the use of performance management systems. The results showed that greater competition among firms, a positive relationship between the stages of performance management system development and performance was of higher significance. They also found the use of integrated measures is more relevant with respect to organisational performance in mechanistic organisations than in organic ones.

Lueg and Vu (2015) identify organisational culture as one critical blind spot in the extant literature as follows: 'Studies rarely address culture as it is difficult to measure and difficult to relate to the BSC'' (p. 317). A predecessor condition to usage is the adoption of the BSC. Often the stated reason for adoption is to improve decision making in the organisation (p. 317). Decramer et al. (2008) found some support that organisational culture impacts implementation of Performance Management System.

It is noted that linking use, usefulness, benefits, or satisfaction to organisational effectiveness is potentially problematic. Therefore, this study will examine the critical success factors that affect adoption and implementation of the BSC, and its use (roles performed). While issues of

perceived usefulness will potentially arise in the interview process, the analysis will be conducted keeping in mind the fact that the extent to which the BSC is perceived as being useful does not necessarily imply improved organisational performance.

2.5.5. Sociological & Political Impacts of MCS in healthcare.

The third theme on MCS literature was the sociological/ political impacts/outcomes. As noted earlier, this research falls within positivist behavioural research, which conceptualises accounting as a means of generating decision relevant information that has the potential to improve efficiency and effectiveness, whereas sociological and critical studies challenge many of the general suppositions of this type of research and offer alternative interpretations of operations and effects of contemporary health-care accounting. So, while this study may not be based on sociological and critical studies theory there are several issues raised by these types of studies that are relevant to this particular research.

> "Institutional theorists such as Meyer and Rowan (1977) argued that formal organisations reflect patterns or templates established in the wider social system and are driven to incorporate practices and procedures defined by prevailing norms of 'rationality' and 'efficiency'. Organisational identities, structures and routines may then not be 'freely chosen' but rather culturally imprinted through the dominance of particular cognitive models." (as cited in Abernethy et al., 2007, p 816).

Indeed, it is suggested that accounting systems may be no more than a part of the institutionalised and 'rational' myth structure of modern societies and they may be decoupled from operational processes and perform merely a ceremonial function.

Abernethy and Chua (1996) researched the integration of the concept of strategic agency in the face of isomorphic pressures. Abernethy and Chua (1996) studied the introduction of clinical budgeting systems within a public hospital in Australia they found that actors did not merely conform to governmental pressure but deliberately chose a particular course of action in order to gain additional resources for the hospital in question. Abernethy and Chua (1996) criticised the decoupling idea and argued that the complex set of management control and accounting changes did fundamentally transform the decision structure, flow of resources and interpretive frameworks within the hospital.

Numerous papers have pointed out how the emergence of healthcare accounting is associated with the rise of a neo-liberal philosophy for smaller government and a public sector that operates more like a competitive private sector (Preston, 1992; Chua & Degeling, 1993: Chua, 1995; Llewellyn, 1997; Preston et al., 1997). This has been observed in a number of countries -- the US, UK, Australia, New Zealand (Lawrence et al., 1994) and Finland (Kurunmáki, 1999). Researchers are pointing out the continual government concerned with rising health costs and the government's attempts to redefine their role and responsibility in terms of both the production and financing of healthcare.

It should be noted, that if healthcare accounting was intended to help control healthcare costs in the US, from the studies so far, this claim has not been achieved (Chua & Degeling, 1993; Covaleski et al., 1993; Samuel et al., 2005). However, there is some evidence that cost benchmarking in the UK has resulted in the standardisation of cost behaviour (Llewellyn & Northcott, 2005). Llewellyn & Northcott (2005) research reported that five years after the UK government introduced the National Reference Costing Exercise in 1998, that hospital costs were tending towards the average. This could also be due to the fact that since 2002, UK hospitals are funded on the basis of the average cost. The authors also noted that they did not investigate whether the movement toward average costs gave rise to any higher standard of care within hospitals. This lack of link to performance, from new public accounting initiatives is a common theme within this literature (Chua & Degeling, 1993; Covaleski et al., 1993; Samuel et al., 2005).

This argument about whether cost considerations have led to an increase in quality effects has also had mixed results. For example, does a reduction in admission rate, or a shorter length of inpatient stay, or a decrease in intensive care use, or a reduction in number of inpatient tests or procedures necessarily mean there has been an increase in the quality of care? Preston et al. (1997) concluded that the accounting technologies actually contributed towards compromising quality and diverted attention away from the negative impacts of healthcare reforms.

Modell (2012) researched the politics of the BSC implicated in: its diffusion and dissemination; performance measurement and strategic alignment; implementation and organisational learning; and governance and regulation. Modell (2012) noted that our understanding of themes of central concern in the “mainstream” literature,

> "such as the use of performance measurement for strategic alignment, strategy implementation and organizational learning, may be enriched by conceiving of them as inherently political phenomena." (Modell, 2012, p. 485)

Modell (2012) noted how normative claims regarding the benefits of the BSC, like Kaplan and Norton promoted, may be exploited as a political resource and hence the researcher called for deeper analyses of this phenomenon to extend extant research. By adopting a relatively holistic view of the politics of the BSC this should sensitize researchers to its multi-faceted manifestations across various organizational and societal contexts. This approach may compel "mainstream" researchers to re-think extant research findings and hence led to further debate on the efficacy of the BSC. This thesis also discusses the political impacts on the BSC.

Ittner and Larcker (1998) used survey data collected by consulting firms and government organisations, to examine three measurement trends: (1) economic value measures, (2) non-financial performance measures and the BSC, and (3) performance measurement initiatives in government agencies. Their objective was to foster research on recent innovations in performance measurement by providing a rich description of emerging measurement practices. Lipe and Salterio (2000) identified decision effects associated with the format of the BSC. Hoque and James (2000) examined the relationship between organisation size, product lifecycle stage, market position, BSC usage and organisational performance. Malina and Selto (2001) conducted an empirical study of the effectiveness of the BSC in relation to communicating and controlling strategy. Other researchers have also examined multiple performance measurement system usage, and some have tried to link these techniques to improved performance (Iselin et al., 2004). In Ghomain et al. paper (2011) they studied a Mashhad municipal organisation to see how the organisation performed on each of the four measures. The performance was significantly different on all four perspectives of their BSC.

The adoption of innovations at the firm level of analysis was conducted by Ax and Greve (2017) on Swedish Manufacturing firms, examining the BSC. Ax and Greve (2017) developed and tested an adoption model which drew on 1) the notion of compatibility between organisational culture and the values and beliefs embedded in innovations, and 2) the perspective that early and late adopters might both be motivated to adopt based on expected economic and social gains and losses. Ax and Greve (2017) assumed that a diffusing innovation

that is compatible with a firm's values and beliefs is adopted early if it is perceived as delivering adequate gains and rejected if it is not perceived as doing so. Conversely, a diffusing innovation that is incompatible with a firm's values and beliefs is adopted late if it is perceived as reducing the likelihood of incurring losses and that the innovation is rejected if it is perceived as not doing so. In most respects, they found support for their model and assumptions. This research examines the impact of the organisational cultural on BSC adoption and implementation.

As a response to the earlier suggestion by Chenhall (2003), and others including Ittner and Larcker (1998) this study focused on organisations in the service sector. The focus was on healthcare, due to its size, the current review of its performance measurement practices and because it provided a mixed sample of public, private, non-profit and profit organisations. Based on this call, and the theoretical literature discussed in section 2.5 above, the second research question of this study was examined.

RQ2: What key characteristics / cultural factors have influenced the BSC adoption and implementation process including the behavioural, organisational, sociological, and political impact on the BSC in healthcare organisations?

The literature above will be relied upon not only for research question two, but also for research questions three and four of this study. The discussion has also set the groundwork for the development of a model to represent the successful implementation of the BSC within a healthcare organisation. The model developed was based on Rodgers (2011) paper on Critical Success Factors influencing BSC adoption.

2.6. Critical Success Factors for Adoption and Implementation Model (Stage 1 Conceptual Framework, Model 2)

Due to the gaps in the theory and literature above, this study also examined the different processes used within the healthcare organisations to try and successfully embed the BSCs into their everyday business.

The Critical Success Factor model was based on Rodgers' (2011) Critical Success Factor model and modified according to the reviewed literature. Rodgers (2011) paper studied the current organisational critical factors that had the propensity to influence the success of a BSC within

UK healthcare organisations. Rodgers (2011) identified ten critical success factors which he grouped into four overarching categories (Diagram 2.5 below).

Diagram 2.5 Critical Success Factor Model (Rodgers, 2011)

The four overarching categories were: strategic purpose, design and process, contextual integration, and strategic human resource management. Rodgers (2011) also suggested that senior management must pro-actively and effectively manage the full range of organisational critical success factors identified, in order to maximise the chances of improving their organisational performance through the BSC. The categories and critical factors are discussed in the section below.

2.6.1. Strategic Purpose (Category 1)

2.6.1.1. Corporate Strategy Relationship

Within this first category of the model there are two main critical elements. The first is the corporate strategy relationship, i.e. to be successful the BSC must clearly relate to the organisational strategy.

2.6.1.2. Measurement versus Management

The second critical success factor in this category was the principle of measurement versus management. Top management needed to have a clear purpose or role for the BSC and

communicate that effectively. Was the BSC going to be used as a performance measurement system, to generate a list of measures and indicators around clinical services or corporate services to observe how they are performing or was the BSC to be used as a strategic management system? Both roles could be successfully implemented within an organisation.

2.6.2. Design and Process (Category 2)

2.6.2.1. Accountability, Assigning KPI Ownership

The first critical factor in this category is assigning the ownership of the BSC measures, so that different organisational leaders are held accountable for the performance of the measures within their portfolio. This factor interlinks with elements of the Human Resource Management strategy category. As cultural acceptance and not a blame culture is necessary particularly if an area is underperforming.

2.6.2.2. Quadrant Balance & Evolution

The second critical factor under this category was the use of a balanced set of measures across the four quadrants. In healthcare organisations historically they have focused on financial measures, but more recently with numerous healthcare reviews there would be the temptation for many of these quality measures to be included in the BSC, and potentially take the focus away from more strategic measures.

2.6.2.3. Data Quality & Information Flows

The third critical success factor in this category was data quality and information flows.

> "To achieve a robust data feed, the organisation needs to have appropriate information and reporting systems in place. … Timeliness, accuracy, and an appropriate level of supporting information resources are therefore of utmost importance to an effective BSC system and are critical to its ongoing integrity and success." (Rodgers, 2011, p. 176)

2.6.2.4. Stakeholder Management

This researcher proposes another critical factor in this category which is also linked to the strategic Human Resource Management category. The management of stakeholders both internal and external (community) is considered a critical factor to successful BSC implementation because healthcare has numerous stakeholders that need to be consulted. This

participation has been shown to be important in prior implementation research (Langfield-Smith et al., 2006; Dunk, 1993; Govindarajan, 1986; Brownell, 1982).

2.6.3. Contextual Integration (Category 3)

2.6.3.1. Healthcare Contracts Performance

According to the model this category had two critical success factors. The first one refers to the current system in the United Kingdom (UK) of managing the healthcare contracts between commissioners and providers of care services. In the UK providers might include acute, mental health, community and learning disability services. In the studied Australian location this structure is different. Disabilities has its own government department. Acute and mental health are usually attached to the district hospitals, so these relationships are managed differently in Australian healthcare organisations. While in Australia there are Government requirements re suppliers and procurement and clinical engagement they form part of the healthcare regulations and hence are discussed as part of the next critical factor instead.

2.6.3.2. Healthcare Regulation

As noted earlier in the quality management framework factor, due to the nature of healthcare there is a great emphasis on quality, and the healthcare sector has undergone many reviews in recent years which meant there has been a number of regulated quality frameworks developed. A secondary issue regarding this category was that because there are the Government regulations there is already a call for a great number of measures to be reported, some organisations may attempt to include all these measures into their BSC.

2.6.4. Strategic Human Resource Management (Category 4)

This category had three critical success factors: management competences, organisational learning and cultural acceptance. The researcher proposes a fourth critical success factor, namely, management of barriers.

2.6.4.1. Management Competences

The first critical success factor in the strategic human resource management category was management competency. As noted earlier in this chapter top management support is essential, but obviously the manager of the project and the executive team needs to have a certain level

of skills and competencies to be able to successful implement and facilitate an effective operation of a BSC system.

Rodgers (2011) suggests these skills might include: listening skills, planning skills, or emotional intelligence. This research proposes that prior experience with operating a similar system in a prior role would have a positive impact on the extent of BSC implementation.

2.6.4.2. Organisational Learning

Rodgers (2011) notes that organisations who are engaged in organisational learning prior to the introduction of an innovation, have more successful implementation. The organisational learning needs to include an understanding of the reasons for the failure of the prior system, and why the new system is a superior system to the old system, or ways of doing business (Rodgers, 2011, p.177). The relative advantages and need for a new system must be understood and 'sold' to the managers and the organisational members and external community alike. The issue is that if the organisation does not learn from past mistakes, failures, poor systems, then they are more susceptible to falling into the same traps as previously experienced. It is also important that once the BSC is in place the impact of the BSC should be constantly monitored, reviewed and communicated by the managers and internal stakeholders. An open culture of feedback and internal stakeholder involvement will help facilitate organisational learning.

2.6.4.3. Cultural Acceptance

The critical success factor of cultural acceptance appears to play a pivotal role in the successful BSC implementation. The ability to sell the BSC in a way that generates buy-in to the BSC system by all stakeholders and across traditional divisional silos within healthcare is a major and time-consuming task.

2.6.4.4. Barrier Management

This research proposes that each of the issues identified below will need to be managed wisely by the organisation to enhance their chances of having a successful implementation of the BSC. The issues are: top down approach; use of jargon; number and type of measures chosen; degree of openness to sharing and new ideas; limited timelines; time consuming process, limited resources and funding; and process breakdown. These issues flow from the research discussed below

In Szabo and Sidor (2014) research they extol the potential benefits of the BSC as it allows the communication of the vision and strategic objectives to all levels of an organisation. It allows organisations to discover hidden deficiencies, or duplications and better defines their important primary tasks, but Szabo and Sidor (2014) found amongst the positive feedback, there were also negative experiences identified like 'declaring lack of BSC benefits, dissatisfaction with the system and fails to meet expectations stemming from the opinion that the BSC is dysfunctional and unhelpful' (Szabo and Sidor, 2014, p. 734).

Szabo and Sidor (2014) found two of the critical success factors to successful implementation to be the need of communication and education. Szabo and Sidor (2014) identified what they considered to be the critical areas in terms of implementation of the BSC. Firstly, the selection and design of indicators, both in terms of number of measures (too little vs too many) and the balance of indicators (financial-nonfinancial, external-internal, cause-effect, strategic-operational). Secondly, the connection between indicators. Areas of problems here were in terms of: the absence of logical relations, the absence of methodology and historical data, and the absence of relations in different time periods with strategic maps. Thirdly, the establishment of targets and critical values. The structure and character of indicators (complexity, transparency), and the cascading process.

In 2005, Silva and Prochnik found 'Seven Challenges for the Implementation of Balanced Scorecard in Hospitals'. They are: 1) obtaining approval to implement; 2) obtaining time and commitment from Chief Executive Officers; 3) developing the value proposal for the Client perspective; 4) develop the BSC throughout the whole organisation; 5) getting commitment for BSC implementation throughout the hospital; 6) getting and interpreting precise data under the cost benefit provision; and 7) keeping the BSC simple and applying it as a learning tool.

The public sector can experience some unique issues when it comes to implementing the BSC. The following perspectives have been identified by Niven (2002) as particularly relevant to the public and not-for-profit sectors:

- *What I do is not measurable; it is difficult to develop appropriate measures;*
- *The results will be used to punish; there is a fear of a hidden agenda;*
- *What is 'the mission'? No clear mission appears to exist;*
- *The public won't understand negative results; political issues;*
- *Why invest in something that will only last with the current administration?*
- *Culture of not trusting business (private sector) solutions;*

- *No burning platform to change; there needs to be a change agenda;*
- *Technical constraints, lack of staff skills and lack of funding.*

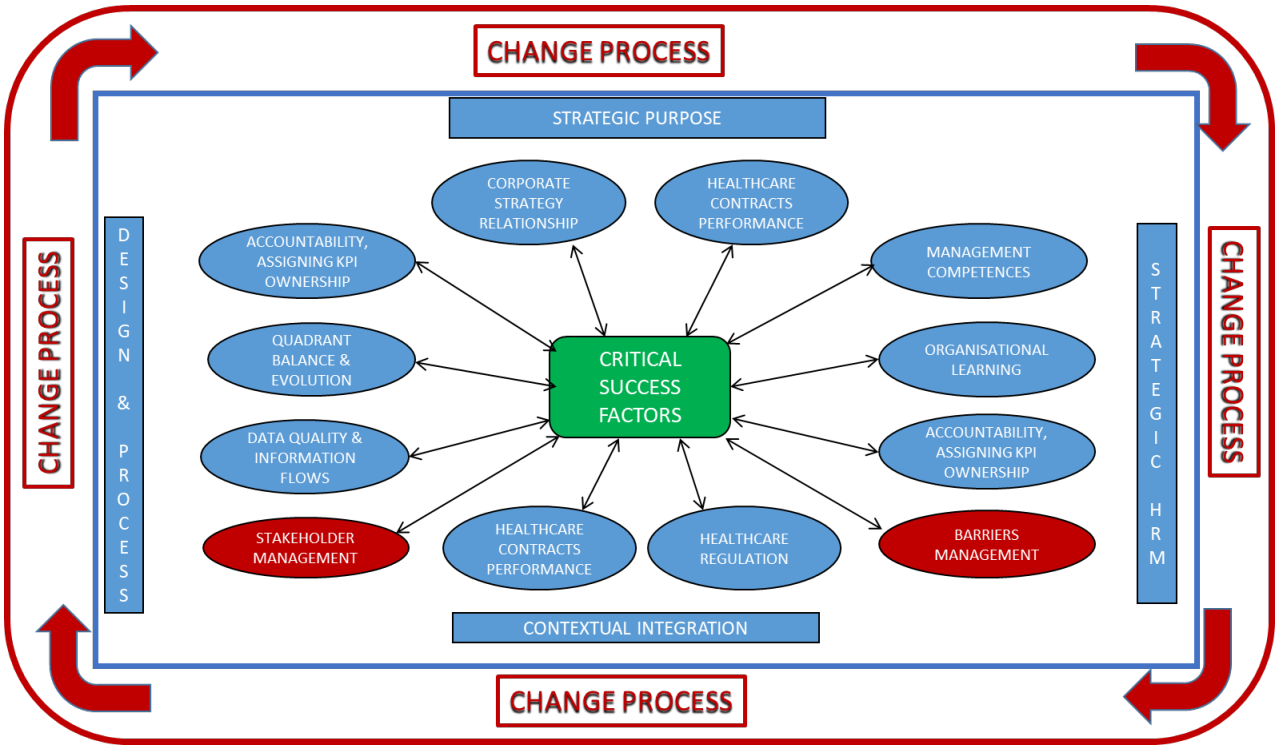
Some of these issues will be examined as part of examining the barriers to adoption, including some of the issues raised in studies on the BSC shortcomings and challenges by Northcott and Taulapapa, (2012); and Norreklit and Mitchell, (2014).

Based on the discussion and literature above the following research questions were examined:
RQ3a: What critical success factors affect the adoption of the BSC or the implementation process within a healthcare organisation?

RQ3b: What barriers affected the adoption of the BSC or the implementation process within a healthcare organisation?

Based on the research in this section the modified Rodger's model is outlined in Diagram 2.6.

Diagram 2.6 Modified Critical Success Factor Model (Rodgers, 2011)



2.7. Change Process vs Compliance Exercise

The researcher believes that another missing element from the model for the success of this type of implementation is the overriding importance of it being very much driven as a change agenda. Initially the success of BSC implementation is very much affected by the way the project is sold (Booth and Giacobbe, 1998). This was even more important in healthcare organisations, particularly public ones, because they come from an environment where lots of new projects, processes, accreditation etc were forced upon them and then dropped for the next new 'fad' or 'legitimising' technique or tool (Abrahamson, 1991)

The theory relevant to the change process part of the conceptual framework is discussed below. For organisations to treat this as a change process rather than just a compliance exercise, they will need to consider two additional factors. These factors are firstly, what roles will the BSC perform within their organisation and secondly what type of decision-making model do they utilise to maximise the success of the BSC implementation and impact.

2.7.1. Roles of the BSC

The roles the BSC is utilised for within the organisation has also been shown to be different for different types of organisations, and impact innovation implementation (Guilding and Pike, 1994). Hence, an overview of the relevant literature pertaining to the roles played by the BSC and implications arising from BSC adoption follows.

According to Horngren et al. (2006):

> "The balanced scorecard helps to communicate the strategy to all members of the organisation by translating the strategy into a coherent and linked set of understandable and measurable operational targets. Guided by the scorecard, managers and employees take actions and make decisions to achieve the company's strategy. The balanced scorecard must motivate managers to take actions that eventually result in improvements in financial performance. The balanced scorecard emphasises non-financial measures as part of a program to achieve future financial performance. The balanced scorecard limits the number of measures only to the most critical ones. The purpose is to focus managers' attention on measures that most affect the implementation of strategy. The balanced scorecard highlights less-than-

> optimal trade-offs that managers may make when they fail to consider operational and financial measures together." (Horngren et al., 2006, pp. 462-463)

Horngren et al. (2006) lists the following roles of the BSC: communication of strategy, decision making facilitation, manager motivation, guiding employee behaviour, focusing attention on the essential facets of business and broadening the performance measures used in evaluation.

Several other commentators have also identified rationales and reasons for adopting a BSC. Niven (2002) provides the following list of rationales for balanced scorecard adoption: aligning improvement initiatives; clarifying current strategy and new organisational strategy; aligning employee goals; communication and education; business crisis management; setting new targets; and new leadership initiatives (Niven, 2002, p. 41). Kaplan and Norton also noted that organisations launch scorecard programs for a variety of reasons. These reasons include obtaining clarity and consensus about strategy; achieving focus; leadership development; strategic intervention; educating the organisation; setting strategic targets; aligning programs and investments; and building a feedback system (Kaplan and Norton, 1996a, pp. 273, 275).

The strategy and behavioural roles of the BSC are also identified by Langfield-Smith et al. (2006) when they stated that the factors that should be common to all BSC approaches are that:

> "The measures should support the objectives and strategy of the business; they should cascade down through the various levels of the organisation; … measures should include both short-term and long-term measures, as well as financial and non-financial measures, to reduce the likelihood of dysfunctional behaviour" (Langfield-Smith et al. 2006, p.662).

Hansen and Mowen (2005) underscore the strategy role of the BSC by stating: 'The performance measures must also be carefully linked to the organisation strategy. Doing so creates significant advantages for an organisation' (Hansen and Mowen, 2005, p. 406). Hoque (2003) also notes that the BSC 'has the potential to provide managers with a linked set of measures that specifies how the four perspectives … can be aligned with the overall company strategy' (pp. 170-172). This essential link between strategy and the BSC is widely acknowledged within the BSC literature.

Langfield-Smith et al. (2006) state that a good performance measurement system should have the following characteristics: 'linked to strategy and the goals of the organisation; be simple, i.e. understandable and easy to communicate to employees; recognise controllability i.e. responsibility accounting; emphasise the positive, to motivate improvements; be timely, to get immediate feedback to allow timely correction if necessary; include benchmarking (stretch targets); embrace participation and empowerment; include only a few performance measures, because too much information can be confusing and the measures should be linked to rewards' (pp. 674-675). Hoque (2003) states that:

> "Firstly, the scorecard brings together in one report many miscellaneous elements of the company's competitive plan… secondly, the scorecard guards against sub-optimisation. By forcing top management to think about all the important operational measures together, … to see if improvement in one area has been achieved at the expense of another area" (Hoque, 2003, p. 170).

Hoque (2003) also noted that the BSC communicates priorities to management, employees, investors and even customers. It is used as a focal point of the firm's efforts in achieving its goals. Olve et al. (1999) state that the BSC is a method of reaching agreement on where an operation should be heading and to make sure that it stays on course (p.4). The measures need to be deliberately selected - few enough to keep track of - and able to communicate a shared view of the organisation's strategy for its future development.

The role of providing, a broader and more balanced performance measurement system is also a prevalent theme in the literature. Organisations using the balanced scorecard do not have to rely on short-term financial measures as their sole indicators of company performance; the scorecard encourages the linking of long-term strategic objectives with short-term processes to help companies build long-term sustainable competitive advantage. The BSC links effects (also called operational objectives) with causes, such as customer and employee satisfaction (Hoque, 2003; Langfield-Smith et al., 2006; Horngren et al., 2006; Kaplan & Norton, 1996 a, b, c). Olve et al. (1999) suggest that the scorecard is an aid in creating a "balance" among various factors to be considered. The measures selected should complement the financial controls and provide a means of reducing the danger of a harmful short-term approach, while also making the employees of the organisation more aware of the meaning of their work and of the underlining assumptions about the future and the organisation. Today's organisations do more

than provide a return to invested monetary capital. For many of them, how they manage talent, market position, and accumulated knowledge is just as important (p.4).

Kaplan and Norton (1996a) describe the BSC as a means of translating an organisation's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system (p. 2). Kaplan and Norton (1996a) perceive the role of the BSC to be more than just a *measurement* system, but also a *management* system. 'If you can't measure it, you can't manage it.' (p. 21). Further, Kaplan and Norton (1996a) promote the roles of the BSC in terms of planning, decision making and evaluation. A scorecard project is not about developing a new set of measures. Measurement – in the form of results and targets – can also be a powerful motivational and evaluation tool. 'The measurement system should be only a means to achieve an even more important goal - a strategic management system that helps executives' implement and gain feedback about their strategy.' (Kaplan & Norton, 1996a, p. 272).

The broad and balanced role has also been one of the major roles promoted by Kaplan and Norton. While the BSC retains financial measures as a critical summary of managerial and business performance, it also highlights a more general and integrated set of measurements.

> "Organisations adopt the balance scorecard because it retains a focus on short-term financial results, but also recognises the value of building intangible assets and competitive capabilities. The scorecard provides a new tool for senior executives to focus their organisations on strategies for long-term success..." (Kaplan & Norton, 1996a, p. 272).

Olve et al. (1999) reinforce many of these roles when describing the BSC as a new management approach that encompasses:

> "giving management control a strategic dimension; communicating to everyone a clear picture of the purpose of his or her work; discussing how (the organisation's) efforts to develop competencies, customer relations, and IT will pay off in the future; creating opportunities for learning by more systematically measuring factors which are important to success, and using these data in an ongoing discussion about the business; establishing greater respect for the fact that many of the most important things done at a company do not immediately result in higher revenues or lower costs; and finding ways to explain to outsiders what a company is and can do," (Olve et al., 1999, p. vii).

Guilding and Pike (1994) developed a model that outlines how the organisational and behavioural effects of periodically valuing brands may influence long-term brand management performance. The underlying structure of the model was drawn from the accounting literature concerned with widely acknowledged budgetary roles. The organisational and behavioural implications for brand value accounting in their model were: Performance evaluation; communication; co-ordination; motivation; planning and forecasting; modifier of perceived organisational reality; political role; and authorisation of expenditure.

Bakkali, Maurice, and Naro (2016) found that a BSC whilst originally introduced for diagnostic control could be progressively transformed into an interactive control tool. The flexibility of the BSC facilitates this process of change of roles for the BSC.

Campbell et al., (2015) investigated the idea that business strategies can be tested and validated by performing a statistical analysis of a firm's internal performance measures. They found

> "evidence that strategically linked firm-specific performance measures could be used (1) to evaluate strategy on a timely basis, and (2) to distinguish between problems, such as strategy formulation, implementation, and fit, that causes strategy to fail" (p. 39).

While this is not the focus of this study, it does provide an insight into the importance of the link between strategy and measures to improve performance. And also, how measures can provide timely information and identify early problems with strategy.

Bobe et al., (2017) found that the organisation they researched adopted the BSC as a part of broader public-sector reforms driven by political ideology. The BSC was adopted with a view to aligning the health sector's strategic policy goals with strategic priorities and operational objectives of organisations. The aim was to unify performance-monitoring of the sector's organisations by enabling 'aggregation of performance information to a sector level in a timely manner to facilitate health sector policy implementation' (Bobe et al., 2017, p. 1230). The BSC developed provided little organisational discretion to integrate financial administration and human resource management practices to the BSC framework. The top-down approach also resulted in inadequate piloting of information system use for the BSC model and inhibited the BSC implementation, and the balance between the planning and performance monitoring roles of the BSC. As a result, the organisation's 'BSC underwent a pragmatic shift in emphasis and

was reconceptualised as a system of enhancing strategic alignment through integrated planning' (Bobe et al., 2017, p. 1230).

This thesis drew on the factors from Guilding and Pike (1994) research (discussed on p. 79) and the BSC literature outlined above to choose the roles to be examined. Hence the implications/roles of the BSC to be examined in this study were: departmental performance measurement; manager performance measurement; communication; resource allocation and co-ordination; motivation; incentive scheme; planning and forecasting; attention directing, political; strategy and change mechanism. This paper researches the idea that the roles the BSC plays can vary and change as necessary.

2.7.2. Decision Making and the Healthcare Sector

The decision-making process within organisations has been found to be important when implementing accounting innovations was discussed in this section. Therefore an overview of the relevant literature pertaining to the decision-making research in healthcare and its implications on BSC adoption, implementation and roles follows.

Accounting performs its decision facilitating function by providing information to reduce ex-ante uncertainty. This in turn enables decision-makers to improve their action choices with better informed attention, focus and effort (Kren and Liao, 1988). The control functions importance is based on the assumption that individuals will not act in the organisation's best interests but rather in their own. Top management thus implement control systems to try and influence the probability that individuals will behave in a manner which will enable organisational goals to be achieved efficiently and effectively. To do this they provide information ex post, after the action choices taken by the managers and this information can be used to measure and reward performance.

Abernethy et al. (2007) suggests that the decision context of hospitals can be depicted using the framework developed originally by Thompson and Tuden (1959). Thomson and Tuden (1959) characterise decision-making within organisations as varying with respect to two key conditions: (1) uncertainty of cause-and-effect relations; and (2) ambiguity of objectives. The first condition of 'uncertainty' may occur for many different reasons. For example, at times it

may not be possible to predict with accuracy the outcomes that will occur as a result of the action taken. This may occur due to incomplete knowledge concerning the input and output relationship or it could occur because of the highly interdependent nature of the work processes that occurs in a hospital environment, where there are multiple inputs. The second of these 'ambiguity of objectives' occurs when there are many and often conflicting objectives to be met and/or where stakeholders cannot agree on the priority for each of these objectives.

Thompson and Tuden (1959) used combinations of these two conditions, 'uncertainty of cause-and-effect' and 'ambiguity of objectives' to identify four decision contexts and what types and uses of accounting and control mechanism would best support each decision-making context (refer Diagram 2.7).

According to Abernethy et al., (2007) there are many non-clinical service departments and clinical support services which fit the criteria of cell 1. In the context of cell 1, the use of the accounting and control systems as 'answer machines' can help facilitate decision-making and control. The cell 2 decision context occurs frequently in a hospital environment where there is incomplete information or multiple and independent activities associated with the process. Hence there is agreement about the desired patient care outcome but uncertainty about how to achieve this outcome. The decision-makers have to objectively appraise the array of possible alternatives to choose an appropriate way to achieve the outcome. Therefore, there is a need for formal information systems and decision support systems, like costs-volume-profit analysis and capital budgeting models.

Diagram 2.7 Decision Making Framework

		Ambiguity of Objectives	
		Low	High
Uncertainty of Cause and Effect	Low	1. Decision by Computation "Answer Machine"	3. Decision by Compromise "Dialogue Machine"
	High	2. Decision by Judgement "Learning Machine"	4. Decision by Imagination "Idea Creation Machine"

Thompson and Tuden's (1959) decision making framework.

In the decision context cell 3, "Ambiguity arises due to disagreement regarding the priority is to be placed on objectives, which objective should be pursued or even the nature of the objectives. Some argue this factor, more than any other, is the major driver of decision-making

behaviour in hospitals. Ambiguity of objectives that occurs in hospitals is partly due to its public, or not-for-profit, status. This creates a politicised environment where preferences to health care are challenged and debated." (Abernethy et al., 2007 p. 811). In this context there is a high probability that there will be professional conflict, within professional groups (e.g. within groups of surgeons, oncologists) and across professional groupings (e.g. between doctors, nurses and radiologists), and between administrators and clinicians. In this environment effective decision-making requires communication channels to be open to debate and consideration of alternative perspectives and be used to help reach agreement over the priority of objectives to be pursued. Accounting and control systems in this context need to generate and further open discussion amongst organisational members. It is in this context that the BSC if used appropriately would provide the best advantages.

In cell 4, there is uncertainty over cause-and-effect relations and also ambiguity of objectives. Hence the accounting and control systems needed here is a combination of those in cells 2 and 3. These systems need to generate dialogue, to articulate the priorities to be placed on objectives, and facilitate the development of consensus amongst conflicting objectives; this will require the development of innovative ways of achieving these objectives. The BSC would also be appropriate in this decision context.

Abernethy and Brownell's (1999) study of large public hospitals attempted to assess the learning role of accounting and control systems when decision-makers faced uncertainty using Simons (1995) notion of interactive control system use.

> "Their results indicate that decision-makers should move away from the 'answer machine' role for accounting and control systems in light of uncertainty and instead use such systems to support greater interaction and dialogue to encourage learning." (Abernethy et al., 2007, p. 812).

Kim (1988) when analysing data collected from accounting information systems groups in hospitals, found some support that in health-care organisations facing the decision conditions of low uncertainty and low ambiguity of objectives, that formal administrative controls such as accounting, rules, plans and policies, were appropriate. Kim (1988) also reported that when the decision context faced and the design of the accounting control mechanism were matched,

there was a significant association with good performance, as measured by using information satisfaction.

Mia and Goyal's (1991) study of New Zealand public hospitals and Macintosh and Daft (1987) study, demonstrated the importance of information characteristics when employing formal information systems in a decision context that calls for judgement to be exercised. Macintosh and Daft (1987) research recognised that in an uncertain decision context, the information set required is a much broader than a narrow financial oriented data set provided by traditional management accounting systems. Provided the information is relevant, timely and not limited to internal financial data, the decision-makers can use that data set to assess the consequences of alternative ways of achieving a particular outcome. The BSC would be an excellent tool to fit this criterion, both as a decision-making facilitator and a measurement system.

Modell and Lee's (2001) in their study of a large Norwegian hospital demonstrated the effects when the decision-makers feel that they do not have adequate controllability within a particular performance measurement system. The Norwegian hospital personnel created an excuse culture in which managers were unwilling to accept responsibility for their operating units' performance. Nyland and Petterson (2004) confirmed the importance of controllability within accounting systems, for them to play a role beyond decision facilitation in clinical units.

Abernethy and Lillis (2001) studied public hospitals within an Australian context and suggested that the accountability structures and performance management system within hospitals should be aligned. It was further suggested that both of these mechanisms should be used to direct decision-makers attention not to efficiency-based criteria but to effectiveness-based criteria. When this occurred, it was noticed that performance management in an uncertain decision context was improved (Abernethy and Lillis, 2001, p. 121).

An increasing number of articles have been devoted to understanding the consequences of management control systems that are implemented in hospitals particularly where the major stakeholders faced different goal sets that often conflicted. Under these conditions it is difficult to state unambiguously what the priority or objectives of the hospital or clinical unit should be.

> "The imposition of financial or other formal administrative systems by government in countries with central unfunded health care systems (will) tighten the potential for

> a clash between the goal servers of administrators and those of the medical professionals who have traditionally dominated all aspects of the decision-making within hospitals." (Abernethy et al., 2007, p. 813.)

One of the issues when implementing new performance management systems is the quality and relevance of the systems to the clientele, and one of the major obstacle to the implementation of the systems is the difficulty of effecting change in an entrenched professional culture where priorities have not been dominated by deficiency related concerns. Jones (2002) explored this issue in his assessment of the UK National Health Service's move to implement a new performance assessment framework. It would appear from Jones (2002) assessment that the attitudes of clinicians and administrators to the implementation of this framework differed greatly. Jones (2002) suggested that to be successful in introducing such frameworks an environment must be created that fosters receptivity to change rather than being centrally imposed.

Abernethy and Stoelwinder (1990, 1991, 1995) studied the consequences of introducing formal bureaucratic control systems into a context where conflicting goals and objectives exist. Abernethy and Stoelwinder (1991) identified the formal administrative systems will simply not work in a context committed to decision-making by compromise. The problem is the system assumes efficiency as the major priority and that people can be trained and socialised to accept this as their goal. The adverse consequences for the physicians and other dominant professionals working in this type of control environment has been well documented (Abernethy, 1996). This raises the question as to whether accounting systems can be designed as 'dialogue' and 'idea creation' machines. Abernethy & Stoelwinder (1995) argues that the degree of conflict experienced will depend on the individual role orientation of the professional and the extent to which management confront professionals with bureaucratic administrative systems which restrict their self-regulatory activities (p. 1).

Aidemark (2001) suggest that the BSC can be effectively used to support a 'decision by compromise' context. As such a scorecard should include both the clinical indicators relevant to the healthcare professionals as well as the efficiency measures that administrators are concerned about. "Aidemark (2001) observed in a Swedish county country hospital that goal uncertainty could be reduced provided professionals defined the measures and controlled what was

important. He argues that the system supported the use of 'clan control' and created a new construction of reality" (cited in Abernethy, et al., 2007, p. 814).

The literature discussed above in sections 2.4, 2.5, 2.6 and 2.7 has led to a fourth research question around Stage 3 of the conceptual framework (refer p. 26).

RQ4: Are there similarities and differences between healthcare organisations that impact either the adoption, process, or roles and if so why?

2.8. Summary of the Healthcare Sector BSC Literature

From this brief overview, it can be seen that there are a number of gaps in the research with respect to BSC application in the healthcare sector. There is a call and need for the development of more robust adoption model of MCSs for example the BSC. There is also a gap in knowledge concerning the critical success factors that impact the adoption and implementation of the BSC within healthcare organisations. There are also gaps in the knowledge around the organisation's culture that impacts adoption and implementation within organisations. More evidence of successful implementations and the factors that led to that success is also needed. These gaps have led to the four research questions described throughout this chapter.

Further gaps that have been identified for future research are identified below. There appears to be very limited data on the effects of implementing such a large change programme as the implementation of a BSC. There is also limited literature on what impact the implementation of a BSC has had on the effective performance of healthcare organisations. Given that one of the major objectives of implementing a BSC is to make strategy "everybody's everyday job", (Kaplan & Norton, 2001c) it seems appropriate to ask the question whether all employees are aware of the organisation's strategy. Potential future research could pursue this question.

2.9. Conclusion

This chapter has reviewed the literature concerning the BSC concept, BSC design, adoption factors affecting the BSC and the BSC in the public sector. The chapter began with a brief description of the Balanced Scorecard and its claimed superiority and how it goes beyond a traditional measurement system to assume qualities closer to a strategic management system.

A brief overview of Kaplan and Norton's BSC writings and related BSC themes was discussed. A conceptual framework for the study was then provided. Then the theoretical literature including: Diffusion of Innovations, Information System Innovation, ABC and BSC adoption factors and RBV of the firm was outlined. Next the BSC adoption model was presented, with the relevant literature outlining factors that might affect BSC adoption.

The next sections discussed the literature regarding MCS and BSC in the Public Sector, and in healthcare. Firstly, a brief overview of the relevant management control systems (MCS) literature, focussing specifically on the contingency oriented research was given, and highlighted how this study will extend this research, both in the area of the impact of the characteristics of healthcare on adoption of the BSC and the successful implementation of the BSC. Secondly. a brief discussion of some of the critical success factors and challenges and barriers literature was presented, leading to the development of the BSC Critical Success Factor Model. Lastly, the roles that the BSC could assume within an organisation were outlined to provide a possible context for Research Question 4.

As can be seen from the above discussion the research questions examined in this thesis have been drawn from the literature review. The four research questions are as outlined below:

RQ1: What organisational, technological, and environmental factors have impacted the adoption of a balanced performance measurement and management system (BSC), within Australian healthcare organisations?

RQ2: What key characteristics / cultural factors have influenced the BSC adoption and implementation process including the behavioural, organisational, sociological, and political impact on the BSC in healthcare organisations?

RQ3a: What critical success factors affect the adoption of the BSC or the implementation process within a healthcare organisation?

RQ3b: What barriers affected the adoption of the BSC or the implementation process within a healthcare organisation?

RQ4: Are there similarities and differences between healthcare organisations that impact either the adoption, process, or roles and if so why?

In the next chapter we will discuss the research methodology employed in this study to answer these research questions. It explains the choice of a mixed methods approach to the collection of the data needed to address the research questions of this thesis. Semi structured interviews and informal conversations at meetings were used to inform the findings for Research Questions one to three (RQ 1-3). Two case studies were chosen to inform research question 4 (RQ 4), involving document analysis, attendance at internal and external meetings at various stages in the implementation process. Chapter 3 will describe the process of data collection and analysis thereof.

CHAPTER 3 - METHODOLOGY

Having reviewed the literature in chapter 2 that forms the basis for the theoretical framework of this study, and developed research questions for examination, this chapter will describe how the research questions have led to the choice of the research methods employed in this study. A description of the relative merits of the chosen research methods and the associated weaknesses follows. Along with a summarised copy of the interview protocol. The full interview document can be found in Appendix B.

3.1. The Research Method

This study comprises two phases: firstly, a qualitative phase involving exploratory interviews conducted with strategic business unit (SBU) managers or the leader of the BSC project team. The interviewees were selected from Australian organisations within the healthcare sector. Secondly, two comparative explanatory case studies were chosen for more in depth analysed, of the research questions, and further development of the model and discussion of the critical success factors that emerged from the literature and interviews.

3.2. The Choice of Mixed Methods

Just as we found in chapter 2 above no theory is all encompassing, neither is any single empirical method. Gill and Johnson (1991) stated that:

> "The main approaches to management (accounting) research … are all imperfect. Each (method) has advantages and disadvantages" (p. viii).

Young and Selto (1991), citing Birnberg et al. (1990), noted that the use of multiple methods of research has much to offer management accounting research. This research has utilised multiple theories in the literature chapter to draw on more than one theoretical perspective, likewise this research has used more than one research method to collect the data. Miles and Huberman (1994) noted that when using a triangulation approach, it can offer elaboration, confirmation, richer detail and new lines of thinking. Miles and Huberman (1994) also referred to Jick (1979) who noted that qualitative methods can be '… the glue that cements the interpretation of multi-method results' (p. 42).

Abernethy et al. (1999) in a special issue of *Accounting and Finance* outlined the strengths and weaknesses of experimental, survey and field research. They noted that although within empirical research the researcher's key goal is to achieve construct validity, internal validity and external validity, trade-offs are made when choosing between and within research methods. Construct validity is generally held to be more advanced in survey research, with less attention paid to it in field research. They question why field research should have:

> "… construct validity requirements that are any different than research addressing the same issues with a survey questionnaire? Arguably the concerns should be the same" (Abernethy, 1999, p. 14).

This research will address this issue later in this chapter. In line with Abernethy et al. (1999) commentary, this research minimised any opportunity for the introduction of biases in the observations collected, to increase the confidence placed in the findings. Otherwise the credibility and reliability of the study is compromised. This research was undertaken in a manner where it can be determined whether the research questions are tenable in theory and supported by the data.

Abernethy et al. (1999) raised two important questions that every researcher should ask. Firstly, is the method appropriate for the research question? Secondly, is sufficient attention devoted to the criteria commonly used to assess research? To be able to address the first question an 'interesting' research question must have been chosen. One that is an issue of concern to other accounting researchers or practitioners; about which little is known or that will add to the literature to date or change some prior misconception.

Having already established interesting research questions and motivations for those research questions in chapter 2, then the appropriate method(s) needed to be chosen. Given the research questions to be examined in this thesis field research was the chosen method.

Hence, as mentioned earlier the objectives of this research was met through a mixed method approach. The rationale behind this was triangulation of literature, models and methods (Jick, 1979). This was deemed necessary to help enhance the support for the conceptual framework, theoretical principles and models developed in chapter 2, and to identify and explain the factors that impact the adoption of the BSC, and the successful implementation of the BSC in the healthcare organisations chosen. This design offers the possibility of improved confidence in the results, as the rich data can provide deeper and more complete understanding of the

conceptions under investigation. Flick (1998) noted that the mixed method approach can add breadth, richness and complexity to the inquiry. This allows for the increased possibility that information and understanding will be enhanced by discovering information that otherwise would not have come to light (Polit & Hungler, 1995). This thesis added breath and richness by employing semi-structured interviews, supported by data from case studies involving observations, attendance at meetings and documentation analysis.

3.2.1. Qualitative Method: Semi Structured Interviews

Qualitative research interviews attempt to understand the world from the subjects' point of view, to unfold the meaning of peoples' experiences, with the construct under examination. The qualitative research interview is a construction site of knowledge. 'An interview is literally an inter-view, an inter change of views between two persons conversing about a theme of mutual interest.' (Kvale, 1996, pp. 1, 2)

In comparison to quantitative studies Miles and Huberman (1994) commented that:

> "Qualitative researchers usually work with small samples of people, nested in their context and studied in-depth …" (p. 27).

Miles and Huberman (1994) also commented that:

> "With qualitative data one can preserve chronological flow, see precisely which events led to which consequences and derive fruitful explanations" (p.1).

Semi-structure interviewing is chosen as it provides:

> "… the opportunity for the researcher to probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on personal experience" (Burgess, 1982, p.107. as cited in Easterby-Smith et al., 1991, p.73).

Semi-structured interviews allows the researcher to share the world of others to find out what is going on, why people do what they do, and how they understand their worlds. The underlying philosophy is to find out what others think and know and avoid dominating the interviewees by opposing the researcher's world on theirs. (Rubin, 1995, p. 3 & 5).

Semi-structured interviews are also useful where extant research does not provide tight conceptual definitions or the opportunity for hypothesis development. This later problem is

the one relevant to the research questions at hand hence this method has been chosen for this study as being appropriate for investigating the phenomena of interest.

As stated earlier, data was collected through the use of a semi-structured questionnaire administered during an interview. The interview was based mainly on open-ended questions. This interview data was then used to test and refine the models to enhance existing theory. By engaging in an in-depth encounter with multiple informants, a great richness was added to the data collected for this research.

Rubin (1995) outlined some guiding principles for undertaking structured interviews, which were operationalised in this thesis. The topic should be introduced and then guided by asking specific questions. Intense listening, and respect for the interviewees and curiosity about what the interviewees are saying, should be maintained, to enhance the understanding of what the interviewees are saying and doing. To understand completely the issues, the researcher should fully explore the topic with the interviewees. The researcher should be careful of what they might be conveying to the interviewee, to ensure that the researcher biases, fears, and enthusiasms do not influence the interviewing style and how the data heard is interpreted. The researcher should avoid the use of specialised vocabulary to lessen the likeliness of imposing their own opinions on the interviewees (Rubin, 1995, pp. 17, 18).

In terms of the selection process, similar to Patton (1990), the

> "individual employees will be purposively selected for inclusion in this research to investigate the research questions and to challenge or extend the theoretical principles established for this research. The selection process will be guided by the need for "information rich" cases where maximum variation would be achieved" (p. 181).

Hence the individual interviewees were purposefully chosen for inclusion in this study to investigate the research questions and to challenge and extend the underpinning theories upon which this research is based and to provide 'rich, in-depth information. Each of the chosen individuals were employed to be the driving-force behind the adoption of the BSC within their organisation. The interviewees were chosen as they represented diverse organisations in terms of size, location, private vis a vis public and individually they represented different levels of experience and different prior positions within healthcare prior to their current positions.

The unit of analysis in the interviews was the organisation, but some relevant individual data was collected. The questions in the protocol were directed toward gaining an understanding of that particular organisation's adoption and implementation of the BSC and the roles it performed within the organisation.

Table 3.1 shows the various relevant characteristics of the interviewee and their organisations.

Table 3.1 Data of Interviewees

Person	Org	Type	Size	Public/Private	M/F	Division	Level	Years
1	A	Metro Hospital	Med/Large	Public	F	Perf Meas	1	10-15
2	B	Head Office	Large	Public	F	Perf Meas	1	10-15
3	C	Metro Hospital	Large	Public	F	Perf Meas	3	5-10
4	D	Rural	Medium	Public	F	Perf Meas	1	25-30
5	E	Rural	Med/Large	Public	M	Perf Meas	2	15-20
6	F	Metro Hospital	Large	Public	F	Perf Meas	2	10-15
7	G	Metro Hospital	Large	Public	F	Perf Meas	2	10-15
8	H	Metro Hospital	Large	Public	M	Perf Meas	2	15-20
9	I	Metro Hospital	Large	Private/Public	F	Perf Meas	1	20-25
10	J	Rural	Small	Public	F	Perf Meas	1	15-20
11	K	Metro Hospital	Large	Private	M	Perf Meas	2	15-20

As suggested by Anderson (1995), the organisational characteristics of selected participants will be broad,

> "providing perspectives from different levels in the corporate hierarchy; from different functional areas, and from different production settings" (p. 10-13).

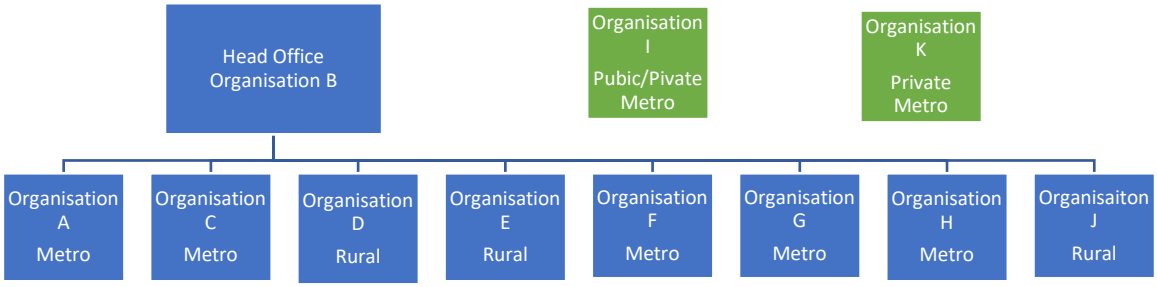
Data was collected on healthcare organisations within Australia, based on size, location and whether public or private. A sample of these organisations based on these variations were then contacted by phone and the research was explained and an email address obtained to send the information sheet and ethics request to. The request to the organisation was firstly to establish whether the organisation was adopting or had adopted the BSC and secondly to interview a person who was involved with/in the BSC project. Hence each of the organisations were chosen because of differing factors, either because they were from a different region, size, structure, or either private, public or both.

The unintended outcome was that there was also a variance in the years of service of the interviewees and the position level that they held within the organisation, before being asked to undertake the leadership in the BSC project. While in the table it appears that all the interviewees were from the same division, that is only because the interviewees were brought from other areas to the performance measurement unit to organise the BSC project. The interviewees were a mix of nurses, clinicians, unit managers, district managers and administration staff. They were also from different levels of authority within personnel, both before the project in their usual jobs and some were given different levels of authority as the project leader. It was noted that all interviewees had similar educational background levels.

Patterns of responses across each of the individuals were investigated, as well as patterns within each of the other factors.

As can be seen from Diagram 3.1 the organisational chart above organisation B was the head office for the district organisations A, C, D, E, F, G, H and J. Organisations I and K were independent of each other and organisation B.

Diagram 3.1 The organisational chart of the interviewees chosen



Organisation B was chosen because it was trying to become a more strategy focused organisation. In doing so organisation B decided to introduce the BSC methodology and strategy map. Organisation B then grouped all the districts into clusters and there were different rollout stages of this project. Initially it was a six-month project, that required them to introduce the BSC and its concepts and develop their own strategy maps and start the organisation reporting against their measures and initiatives. With the aim that it would embed into everyday organisational life for them and their sub organisations. Organisation A, C, D, E, F, G, H, and I were all separate organisations that created their own organisational BSC. Organisations I and K were chosen as they were privately run organisations.

In terms of how the interviews were conducted, the researcher applied the following principles, based on Seidman's (1998) ideas about techniques and guidelines on conducting appropriate, informative and robustly credible interviews:

1. **Listen more, talk less**

Firstly, the researcher tried to focus intently on what the interviewee was saying. She concentrated on finding the substance to make sure that she understood it and assessed whether what she was hearing was as detailed and complete as she would like it to be. She internalised what the interviewees were saying, so that later on her questions would flow from this earlier listening. The researcher listened for the "inner voice", as the public voice is aware of the audience and can be guarded and protective, because they wish to be seen in a good light.

She remained conscious of time during the interview; and how much had been covered and how much there was yet to go. She was sensitive to the interviewee's energy level and any nonverbal cues they were offering, and any cues about how to move the interview forward as necessary (Seidman, 1998, p. 64). This effective listening throughout each of the interviews was evidenced by the researchers transcribed paragraphs being short and relatively infrequently interspersed among the longer paragraphs of the interviewees' responses.

2. **Note-taking**

Besides tape recording the interview, during the interview the researcher also made notes. The working notes helped the researcher to concentrate on what the interviewee was saying. This way the researcher did not need to interrupt the interviewee and allowed her to keep track of themes the interviewee mentioned and come back to those themes when the timing was right. (Seidman, 1998, p. 64)

3. **Follow-up on what the participant says**

As necessary the researcher responded to what the interviewee answered with follow up questions, asking for clarification, or seeking more details, or requesting examples. The researcher let the questions follow, as much as possible, from what the interviewee was saying. At times this led to insights and themes being explored that not initially been expected, and some interesting sidelines were pursued that added depth to the study and other issues pertaining to the research questions.

4. Explore, don't probe

As necessary prompts were used to direct the interviewee towards what they knew but had not yet mentioned. Prompts were used to jog their memories but not to put words in their mouths. On occasion the question was repeated using alternate words, to gain more detail. These prompts are noted on the interview protocol in Appendix B where the researcher wanted to check on other possibilities, she offered specific prompts from the checklist on the protocol. Probes were also used when asking respondents to confirm, clarify, explain or extend what they have already stated.

5. Ask questions to gain clarification

When the researcher did not understand something the interviewee was saying, she would let the interviewee know, so that clarification and understanding could be sort. When terms were not understood, the interviewee was asked 'What do you mean by the term …?'. This allowed the interviewee to explain in greater depth what they meant by the term. This allowed the researcher to understand the term better and the complexities implied by the word.

6. Ask open-ended questions and avoid leading questions

Open-ended questions were used during the interviews to establish the territory to be explored while allowing the participant to take any direction he or she wanted. When necessary questions were asked to either bring the conversation back to the research questions or to re-direct the focus or help an interviewee with a possible direction when they were struggling for a response.

7. Tolerate silence and follow your own hunches

The researcher gave her interviewees time to think, reflect upon or add to what he or she was saying. She trusted her instincts and risked asking some difficult questions when the interviewee either laughed nervously or was hesitant to travel a certain path in conversation. Sometimes during an interview, another question would form in the researcher's mind, from the conversation, she would then pursue this question with the interviewee. This added to the rich data collected, as factors not identified in the literature were introduced during the conversations. Several themes emerged from following these principles, that would not have otherwise been identified. These themes added to the depth of understanding of the research questions being explored.

Interview Questions

Several interview questions were provisionally drafted (shown in table 3.2 below, refer Appendix B for the full protocol). The provisional questions were drafted for organisations that have adopted the BSC. This allowed the interviews to be managed flexibly by tailoring them to the knowledge base of each interviewee. The focus of the interview was allowed to be influenced by the expertise, experience and interest of the interviewee. Hence, the questions cast a broad net and let the factors used in the model develop from the interviews.

The prior chapter outlined the research questions that had been developed from the literature, although the interviewees were not restricted to the protocol questions, if they pursued different paths the interviewee was given the opportunity to continue down the new path. This led to different factors being identified as important.

Table 3.2 Interview Protocol Summary:

Main Research Question to establish BSC construct:

Some academics and practitioners refer to this particular type of balanced performance measurement system (BPMS) as a Balanced Scorecard, have you heard of a BSC?

If yes: *How did you hear about it? Would you describe for me your understanding of what a BSC is?*

Sub Research Question:
To what extent would you say your organisation has a well-balanced performance measurement system? Could you expand on that, maybe by using examples?

RQ1: Factors affecting the adoption of the BSC

One of the objectives of this study is to identify any organisational, technological and environmental factors that impact on the adoption of a balanced performance measurement and management system (BSC).

Main Research Question: ***As I related that objective to you, what were your thoughts about any factors that have impacted on the performance measurement system used in your organisation?***

Sub Research Question:
The study also aims to identify any factors that have affected the perceived relative advantage of them having a balanced performance measurement system. What are your thoughts on this issue?

Follow-up: Why do you think your organisation choose the BSC?

RQ2: Impact of Healthcare sector on 'extent/form of adoption' of BSC. Identifying barriers to adoption of the BSC

Main Research Question:
Could you outline the key features / factors about your industrial context and how this may have affected the PMS implemented?

RQ3: Process of implementing and embedding the BSC.

RQ3a: What critical success factors affect the adoption of the BSC or the implementation process within a healthcare organisation?

RQ3b: What barriers affected the adoption of the BSC or the implementation process within a healthcare organisation?

Sub Question *– How deep within the organisation has the BSC been rolled out?*
To what extent have modifications been made to the BSC to facilitate the cascading, i.e., has the cascading impacted on Content/form of BSC?

RQ4: Range of roles the BSC performs

Main Research Question:
What are/were the roles performed and implications arising when you "modified" your PMS/BCS or (KPI's if not balanced)?

Sub Question:
Please indicate the relative degree to which your PMS performs the following roles. As you make your choices on the scale, please explain the rationale behind your answer.

Possible Roles:

Department Performance Measurement
Managers Performance Measurement
Communication Tool
Resource allocation and co-ordination
Planning and forecasting
Motivation/Incentive schemes
Political
Attention directing
Change mechanism
Strategy
Any other roles that you can think of?

For Research Question 4 the interviewees were given a sheet with these roles listed and a 5 point Likert scale from none to large, and were asked to explain their reason for the choice on the scale (refer to the last page of Appendix B).

3.2.2. Field Research Method: Case Study

The researcher argues that case studies are particularly appropriate for this study, as the model is not well developed, and these case studies represent an exploratory device which could be a precursor to survey research. The individual case study will examine whether the theoretical models explain the observations. If not, the theory needs to be modified or rejected. If it does explain the observation, then other researchers should be able to replicate the findings in similar or different healthcare organisations. The objective of the individual case studies is to explain the particular circumstances of that case. The researcher is looking to provide explanations of the individual observations. The cases were selected based on the premise that some of the theory is well developed and some of the major research issues are clearly defined.

Both cases were chosen as they were in the early stages of adopting the BSC and had had the BSC mandated upon them. Hence, the researcher could observe the process undertaken by each organisation to try and embed the BSC into business as usual within each organisation. The first case was chosen as during the interview phase it became obvious that this organisation had a great understanding of what the BSC was, and what goals they were hoping to achieve by implementing the BSC. This organisation consistently had positive articles in the local media. The organisation therefore stood out as a "critical case" which would directly address the issues of the research questions and BSC Adoption model development. Hence the object of this case was to determine whether the model provides good explanations of the observation or whether the model needs to be modified or a new model proposed.

The second case was chosen, as during the interview phase it was noted that this organisation had a history of resistance to change. This organisation at the time had also had a lot of negative articles in the local press. This organisation stood out as an example of an "extreme case", which could indicate the extent to which existing theory can provide explanations of observations in different circumstances. This could lead to the identification of areas in which the theory needed to be modified. The use of multiple case studies allowed the researcher to develop 'a richer theoretical framework, capable of explaining a wider range of circumstances' (Ryan et al., 1992, pp116 - 121).

The case studies when undertaken by the researcher as an observer only, there was no consultancy work involved. The researcher was invited for a minimum six month period and maximum eight month period to attend and observe executive meetings, and measurement development meetings, within both organisations. All interviews were also conducted during this same fifteen-month time period. The measurement development meetings in case study one where numerous and involved a wide spread of participants from different departments within the organisation and representatives from the external stakeholders. Case study one also run several separate meetings for the external stakeholders only, as the availability of external stakeholders to attend during normal work hours was difficult. The researcher was permitted to attend and observe these meetings. Case study two had limited interaction with external stakeholder so the researcher relied on the communication sent to the stakeholders by the organisation. The researcher was also invited by both organisations to attend some of the reporting meetings once the BSC had been developed.

This level of observation during each of the stages allowed the researcher to observe the process of BSC development and implementation and roles performed by the BSC, firsthand to confirm what had been revealed during the interview phase. The researcher was also invited to a Strength, Weakness, Opportunity, and Threat (SWOT) analysis meeting, after the initial reporting stages had been completed.

Document analysis was also undertaken, as the researcher was provided with copies of the initial information provided to the participants about the BSC at both organisations. The researcher was also provided with the PowerPoint slides and other handouts that were provided to the participants at each of the measurement discussion meetings. Copies of the suggested BSC measures and discussion concerning those measures were made available to the researcher. As was each of the different iterations of the BSC that were developed. At the SWOT meeting the researcher was allowed to take notes and given a copy of the analysis.

Hence in this thesis the case studies were used more as a patterned model of explanation, providing an opportunity to understand the process in a specific healthcare setting and compare that to another case study in healthcare to further explain the observations. Where the observations are consistent this reinforced the theoretical models, where they were inconsistent, this allowed for model and/or theory development.

3.3. The Research's Credibility

The credibility of qualitative work is judged by its transparency, consistency/coherence, and communicability. Transparency means that a reader of the qualitative research report is able to see the basic processes of data collection. (Rubin, 1995, p. 85)

The researcher kept records of what the researcher, saw, heard, and felt to make this research transparent to others. The original recordings of the interviews and the notes taken at observation meetings have been kept both as, the original digital recordings and the electronic transcription of the recordings. The NVivo coding has also been kept, to ensure the materials are an accurate record of the findings. The transcripts were completed from the recording device into word, a transcriber was used to help with this task, but each transcription was then crossed checked by the researcher for accuracy. The transcriptions included any sounds, gaps or non-verbal clues as well as the words themselves. A record was kept that included the original coding categories, i.e. how the researcher sorted out what people said. It also included the in-text comments that were jotted down during the interview. She also retained any marked-up transcripts, to sort out what was directly quotable. (Rubin, 1995, p. 85)

Table 3.3 contains a sample of how the coding was developed in NVivo. As is illustrated the interviewees comments were coded by themes raised during the interviews.

Table 3.3 Samples of NVivo Coding:

Tree Nodes

Name	Files	References
Factors affect adoption	3	4
Champion	9	20
Compatibility - organisation	7	11
characteristics of the organisat	7	25
culture	3	9
internal divisions	5	8
Consultant's involvement	4	5
IT Facilities	10	31
Perceived relative advantage	4	9
Perceived need	3	3
Relative advantage	8	40
Size & complexity	6	10
Top Management Support	10	43
characteristics of	1	4
Funding	7	21

Tree Nodes

Name	Files	References
Process	8	27
act on feedback etc	1	1
Buy in	9	23
cascading	7	19
change project	4	5
Choose of measures	6	12
embedded	2	2
engage community	6	14
Fad & Fashion	7	15
level of consultation	3	5
limited timeline	4	6
link to funding	5	8
objective owners answerable	1	1
Operation vs strategy	1	3
review measures	8	19
Time consuming	6	10
Training	5	5
use of jargon	1	2

As mentioned earlier the interview data was systematically coded. The NVivo package and colleagues were used to assist in the coding phase. This increased the reliability of data coding, to ensure that the researcher had not used selective 'quotes' to support the relations of interest. Systematic coding also enabled the researcher to identify confirming evidence and provide an audit trail, hence increasing reliability.

The themes were identified by the thematic analysis tree generated by NVivo itself. The data was coded by the researcher and then coded again by an independent person to prevent researcher bias. The colleague did not have an accounting background and hence coded with fresh, unbiased eyes. The coding was identical, except the researcher had at times noted two themes in the one sentence or paragraph that was not identified by their colleague. The themes themselves as outlined in the findings chapter and the number of themes were identical between the coding of the researcher and the colleague, adding credibility to the results and the discussion around the findings.

The interviewees were provided with an information sheet about how the material would be presented in the thesis, and what would happen if they asked to be kept anonymous, or if any particular information was received 'off the record' (Rubin, 1995, p. 86). The Participant Information Sheet and Consent Form are included as Appendix A.

To evidence the credibility of this research and substantiate the logic of the conclusions, the researcher has quoted generously from the interview transcripts to illustrate the key points that the researcher has made. The concepts, themes and theories concentrated on were those that arose from most of the interviewees or that raised a unique, unanticipated theme.

In terms of observation and attendance at meetings mentioned earlier, the researcher was given permission to either digitally record some of the meetings or to take extensive notes. On two occasions when the venue was large in size, when listening back to the recordings it was difficult to hear everything that was said, therefore the note taking became an extremely important part of the research.

In terms of the document analysis, within the case studies the researcher was given access to all the documents around the BSC project, including the information given to educate the

champion, their brief for the project, the presentations and communications made to both the internal and external stakeholders, the evolving version of the development of measures and initiatives for the BSC, the reporting mechanism, and the reports themselves. In Bell (2000) he commented that:

> "Content analysis in relation to documents enables inferences to be made about data in relationship to its context, which are both valid and replicable" (p. 111).

This research uses thematic analysis, which is similar to content analysis,

> "but also involves more explicit qualitative analysis of the meaning of the data in context. It is useful for systematically identifying and describing features of qualitative data, which recur across many participants" (Marks & Yardley**,** 2004, p. 67).

3.4. Reliability issues

In qualitative research the crucial issue is not whether the constructs are measured perfectly but rather whether the researcher took all reasonable steps to reduce bias, and hence can a critical reader place confidence in the tools and the results of the empirical work.

Concerns that threaten reliability in this study include:

i) the researcher could introduce bias during the interview phase;
ii) subjects may interpret the constructs differently;
iii) variables may not be directly observable, and/or
iv) theories could lack precision.

In the interview phase the interviewee was asked to define their own interpretation of the construct being examined, so this facilitated a more broad, in-depth examination of the construct. It also allowed the researcher to be sure the interviewee understood the construct under examination. Many of the constructs used were familiar and well defined within the Healthcare sector examined, and where they were not the interviewee was given the opportunity to give their own understanding of the construct under examination.

Abernethy et al. (1999) noted that Schulz (1999) did not explicitly address construct validity, but then suggested ways that construct validity could have been addressed in his study. They suggested that it would be a good exercise to map the theoretical model into a table that describes all the constructs and items that measure them. The mapping allows the researcher and reader to assess the scope and depth of measurement opportunities and achievements

within the study. This study has used a conceptual framework and a comparative summary tables to illustrate the findings for the explanatory case studies.

Field research, by design, will never have the statistical basis for establishing construct validity that is common in survey work, but it is still important that the field researchers pay attention to the concerns of construct validity. A researcher will be familiar with the extant literature and 'thus implicitly or explicitly takes a theoretical model into the field' (Lillis, 1999, p. 92). Therefore, it should be possible to specify at least in broad terms the characteristics associated with the constructs of interest. An illustration of this can be found in Lillis, 1999, p. 92) where the researcher '*a priori'* identifies relations between a number of abstract constructs: competitive strategy; financial and non-financial measures of performance; and performance measurement effectiveness. Lillis (1999) attempts in the design phase to map her constructs and measures. It has been suggested that a pitfall of using contingency theory research is that this type of research failures to define variables in an operational way. This is not necessarily true, but as Lillis (1999) comments: "Demonstrating that the study has observed and measured coherent constructs with validity presents a significant challenge for the researcher" (p. 92).

This study used a semi-structured interview to prompt the researcher towards the constructs of interest. Thereby increasing the opportunities that the researcher will gather data relevant to the postulated constructs and permitting boarder responses than is possible with a quantitatively based survey. This approach is also less likely to introduce researcher bias than a survey. The data collected was coded based on a systematic protocol. NVivo package and colleagues were used at different stages to assist in the coding phase. This increased the reliability of data coding, to ensure that the researcher has not used selective 'quotes' to support the relations of interest. Systematic coding also enabled the researcher to identify confirming evidence and provide an audit trail, hence increasing reliability.

To avoid selection bias at the interviewee stage, the organisations were chosen randomly, from a large sample of organisations within Australian Healthcare, but according to a selection of different sizes, locations and public and private. Each of the persons interviewed all were given the same position, their sole role was to implement and embed the BSC into the performance measurement system of their organisation. They were all employed within the performance evaluation area and were included on the executive team. (Refer Table 3.1)

Potential other threats in this study included a confounding event relating to the point in time when the interviews were undertaken. There was a major incident which received lots of media attention. This event is outlined in the findings and the potential positive and negative impact of this event upon the results is noted.

The purpose of the exploratory interviews is not to prove a causal model, which would subject this phase to the same internal threats as the survey, because of the difficulty of providing strong statistical evidence that the variables of interest do actually covary. The intension is to understand better the variables considered in prior research and to identify other variables which may be important. Hence, for this phase it would seem more appropriate to apply what Golden-Biddle and Lock (1993) refer to as the 'notion of plausibility' to assess whether there is support for causal relations. Evidence is also required that would enable the ruling out of competing explanations. Hence, as noted earlier, this researcher collected data from multiple sources and multiple sites and through different means until the data converged to a preferred, most plausible causal explanation.

The researcher asked the interviewees to describe their understanding of the BSC so the researcher could assess that each interviewee understood the construct being examined. The BSC adoption factors (model 1) and the critical success implementation factors (model 2) were driven by the literature and confirmed by the interviewees as part of the semi-structured interviews. Hence, the factors for both models were either reinforced or identified from the interviewees themselves using NVivo (thematic analysis).

During the interview phase the common themes and factors emerged very early in the interview process. Each of the interviewees expressed a common understanding of the factors under examination. The same BSC adoption factors were identified in each interview, and each interviewee expressed a familiarity with the factor and an understanding of the terms impact on either the adoption and/or implementation of the BSC.

Hence the researcher believes that the crucial issue of whether the conclusions are justified by the data, has been addressed appropriately in this research.

3.5. Summary

Birnberg, Shields and Young (1990) stated:

> "The important determinants of the appropriateness of any method for a given project are: the research question of interest (Yin, 1989), the current state of knowledge regarding a particular phenomenon, and the feasibility of using a given method to perform the study" and that, "A multiple methods approach to empirical research in managerial accounting will advance the discipline in a more sound manner and at a faster rate than relying solely on any single empirical research method" (p. 51).

Hence in this study the field research was used to provide a deeper description of the management accounting phenomena under review, the BSC. It was also used to help in the development and refinement of the models by allowing the researcher to explore factors that are widely recognised as important or critical and to identify factors either not well understood or unique to healthcare.

Miles and Huberman, 1994, identify the following disadvantages of qualitative research:

> "… the labor intensiveness (and extensiveness of the months or years] of data collection, frequent data overload, the distinct possibility of research bias, the time to months of processing and coding data, the adequacy of sampling when only a few cases can be managed, the generalizability of findings, the credibility and quality of conclusions, and the utility in the world of policy and action" (p. 2).

Limitations are that it was also possible that interviewees might be influenced by the form and wording of the questions and by the interviewer's characteristics (Mishler, 1986). Another short coming was that the data sets did not all comprise multiple measures using Likert-type scales; therefore, reliability testing was not possible for most of the adoption factors (Abernethy et al., 1999). A Likert-type scale was however used to measure the impact of each of the roles in the organisations.

Despite the disadvantages or limitations outlined above, the qualitative research approach that was undertaken in this study was done in a manner to try and minimise these disadvantages or limitations. The minimisation of limitations was achieved, firstly, by the

manner in which the interviews were conducted, and coded. Secondly, because of the use of multiple methods to examine the research questions.

3.6. Conclusion

This chapter has outlined the reasons for the chosen method of data collection, and the actions taken by the researcher to establish, credibility, validity, and reliability on the findings of the research. To establish the depth and fullness of understanding of the adoption of the BSC and implementation, the chosen method was semi-structed interviews followed by field case studies and document analysis.

The next chapter will discuss the findings from the interviews concerning stages 2 and 3 as outlined in the conceptual framework. It will show how the information obtained through the interviews have helped shape and support the development and refinement of the BSC Adoption Model and the Critical Success Factor Model, pertaining to BSC adoption and implementation.

CHAPTER 4 - FINDINGS ON BSC ADOPTION, ORGANISATIONAL & HEALTHCARE CHARACTERISTIC IMPACTS & CSF OF BSC IMPLEMENTATION

4.1. Introduction

The interview findings are presented in accordance with the research questions, in line with the major factors and themes of interest that were developed over the course of the interviews and the coding process. The discussion in this chapter will follow each of the first three research questions. The following section headings are used; 1) BSC Adoption factors, (organisational, technological, and environmental factors), 2) Characteristics of the organisation, and of the healthcare sector (Cultural/Environmental factors), and 3) Critical Success Factors affecting the process of implementation of the BSC.

4.2. BSC Adoption Factors (RQ1)

Based on Research Question 1 (restated below) several organisational, technological and environmental adoption factors were identified by the interviewees as having an impact on the extent of BSC adoption and implementation in their organisation: top management support, champion, consultants, size, compatibility, complexity/diversity, Information Technology quality/compatibility/usability, and perceived relative advantage.

RQ1: What organisational, technological, and environmental factors have impacted on the adoption of a balanced performance measurement and management system (BSC), within Australian healthcare organisations?

4.2.1. Support

The first factor to be discussed within Model 1 is Support. There are three important sub-factors within this adoption factor, top management, champion, and consultants. Each of the organisations within this research were separate organisations with their own District Manager, CEO and Executive Management team.

4.2.1.1. Top Management

The first support factor to be discussed is top management support, in line with prior research, (Brown et al., 2004; Premkumar & Potter, 1995; Prescott &Conger, 1995) it was seen as

essential to the adoption of the BSC. Interviewee 10 who was part of two BSC projects (organisation F and J), saw the importance of top management support firsthand and noted that

> "*if the CEO wasn't absolutely working on and with the BSC team I don't see how people could successfully implement the BSC -- that was one of the issues I experienced at organisation F*".

Interviewee 10 thought that the Chief Executive Officer at organisation F did not even understand the BSC. The champion (Interviewee 10) was forced to do all of the selling and educating but thought the Chief Executive Officer really needed to do that work. Interviewee 10 had successfully implemented the BSC at organisation J, therefore the Chief Executive Officer at organisation F just believed it would also be successful at organisation F. Whereas part of the success in organisation J, noted by Interviewee 10 was that the Chief Executive Officer was absolutely 100% committed to it. The Chief Executive Officer's belief and action are critical success factors.

This was reinforced by the fact that organisation F, where it was observed that the District Manager and the Chief Executive Officer were being a bit hands off in terms of the implementation of the BSC, did not proceed with the implementation of the BSC.

Executive leadership was also a key factor according to Interviewee 1 who noted that

> "*one of the largest influencing factors of adopting the BSC at an organisational level was the engagement of the executive teams with the methodology*."

At organisation A even though the District Manager changed three times during the time in which the BSC was being developed, the executive team was fairly stable and were a coherent group. They knew each other's styles and how they functioned so there was a high degree of transparency. People were able to throw their ideas on the table and have them respected and then put together in a plan. As noted by Interviewee 1:

> *"So, ... even though we had a leader change, that group was very important in making sure that the planning process was not derailed at all and that was also part of the reason why they were so confident in engaging with external stakeholders."*

Interviewee 2 observed that those organisations that had leadership teams that were less familiar with their methodology or that had treated it merely as a process exercise stopped once their map was developed, they had fulfilled their obligations and they had no intention of

actually taking it to the next level of implementation. The areas in which interviewee 2 observed change was at the district level where executive teams had engaged with the methodology and had made an attempt to start implementing the plan.

Interviewee 2 at the head office (organisation B) discussed that in the districts where the executive team had delegated the reporting out to other team members and had disengaged from the reporting process, when reports were submitted, the other team members did not have sufficient knowledge to lead a discussion in the same way that had been occurring in other districts where the executive team was engaged in the process. The executive team at the corporate level were not as familiar with the subject matter the discussions were not as detailed or analytical as they needed to be to push the change forward. This was reinforced by Interviewee 8 at organisation H who felt

> *"there was very poor understanding of measurement systems at the top of the (head) organisation which hampered the usefulness and implementation of the BSC."*

It was also noted by Interviewee 2 that it was harder to bring about change when actions have impacts across an organisation rather than one part of the organisation such as at the district level where there appears to be more capacity for change. Interviewee 2 observed that

> "*at the district level they were able to make quite a few decisions and make them happen very quickly without bureaucratic interference and multiple levels of decision making."*

It was a lot slower to make changes happen at the head office organisation because of the size of the organisation and the flow-on effects of the change.

In organisation B this difficulty meant that they stopped reporting very early, after the second report and this impacted on the districts' view of the BSC implementation:

> "*Everyone …could see those reports and the actions that were listed on those reports and people were initially quite excited, that sort of spurred them to make sure that they did their first reporting because at about the time that the executive management team at corporate office released their first of several reports was also the time when … the first cluster of districts were ready to start reporting and so it sort of modelled the correct behaviour and gave them an idea about what they were looking for when they were being asked to report.*"

This approach worked extremely well, as it was appropriate modelling of behaviour. Interviewee 2 outlined that the districts that had seen the benefits of the BSC, retained the framework and continued to conduct their reviews. But they were placed on hold while they waited for the new strategy to be released from organisation B (head office) so that they could continue to conduct their reviews in later years.

At organisation A the executive led by example. As soon as the district scorecard was completed the executives had one month to write their own performance appraisal and development plans using the new district template. So, every executive had a performance appraisal and development plan, then it was cascaded down to the next level. It worked very well because people knew that their executive director had a performance appraisal and development plan, while in the past they did not but were still pushing other people to have plans at lower levels of the organisation. As noted by Interviewee 2:

> "*So, there wasn't the argy-bargy that there had been in previous years about having a performance appraisal and development plan because now they all did it."*

In organisation G the District Manager at the time, who was the BSC champion appeared to lose interest in the implementation process. When people saw this, it added to the downfall of the BSC in organisation G. Interviewee 7 stated that

> *"they attempted to work around that, as they had good leadership on the Executive that supported the BSC, and who participated in everything that they were asked to do by the project team."*

Unfortunately, this was not enough for the BSC to continue in this organisation, although parts of the planning process and initiatives had been retained.

Interviewee 3, from organisation C (which stopped the BSC very early) stated that

> *"as champion she only had one to two hours with the whole executive team each week and two hours with the two executive project sponsors, per week."*

Interviewee 3 discussed that the level of support from the executive team varied greatly, behind closed doors there were some of the executive saying, '*this is rubbish*', but the District Manager thought the idea of the BSC was excellent and a great tool. They had a period when the District

Manager went away for two months, during that period of time things started to grind down to almost a halt. Interviewee 3 stated that it was due to her

> *"pushing and fighting and arguing with the executive team that we were able to keep going and that was because the main guy who didn't like it was put in charge while the DM was gone. And his view was, "Great! He's gone. Let's stop this crap."*

It was a difficult period of time for organisation C, so unless the key executive team bought in and supported it, the project would have ceased. Interviewee 3 said:

> "*I had to keep reminding him that the DM will be back and this project will have to start up again and then we've got to make up all this time, let's just keep going, and I just had to keep doing stuff in the background and trying to get the team to talk about it at our one hour meetings that suddenly turned into half an hour and he just didn't want to discuss anything or talk about it so it was basically me doing whatever I* (could). *It was very hard to try to key in times for workshops, to try to get sign off, that was when we were doing measures developments so that was a crucial time because I knew everyone would go, 'Ugh, measures' so it was quite rough. So (as) for us it was definitely executive board as number one* (factor of adoption)*."*

So, having a champion of the project in the district on the executive team as well as the District Manager on board was essential. With the support of the District Manager, people within the organisation could see it was not just a corporate level strategy because the District Manager was endorsing it and saying it is their opportunity to develop something great for the district. People then came on board, but everyone's first opinion was '*it's head office'* fad again and therefore were resistant to the idea of the BSC.

Having mixed support at the top also led to difficulty in trying to implement the BSC in organisation E. Interviewee 5 noted that in organisation E (which no longer maintains the BSC), there was mixed support amongst the executive, the District Manager was seen as being committed to the BSC but there was resistance at different levels within the organisation.

Whereas in the organisations where the Chief Executive Officer and executive were all on board and supportive the BSC was implemented and often maintained after the mandate was

lifted. As in organisation J (where the BSC is embedded) the Chief Executive Officer was driving it. Interviewee 9 (organisation J) noted that the Chief Executive Officer said:

> *"what you write in your plan for the board, I need to have some input into because your numbers need to back up my strategy. When we are prioritising initiatives, I need to have some input, when you are developing business cases, the business case template needs to be something that supports what I'm doing. ... I will be in your face because if you don't give me the tools when you are doing what is the annual process, I can't do what I need to do."*

Interviewee 1 summed it up best when she noted that

> *"a vital implementation factor was having the executive, at the highest level, modelling the right behaviour and demonstrating to the people that they were expecting to follow through on it, they were sticking with it, and that it was not an optional extra".*

As can be seen from the above discussion, top management support had a very large impact on the organisations ability to be able to adopt and implement a BSC within their organisation. The higher the support of the top management and their participation the more successfully the BSC was embedded.

Although by far the most commented on, acknowledged and observed factor of impact on BSC adoption success was that of the Champion and their ability to get buy-in by top management, the different silos/divisions and external stakeholders of their organisations. Hence, this factor will be discussed next.

4.2.1.2. Champion

The second support factor to be discussed is the Champion, in support of prior research (Shields, 1995; Foster & Swenson, 1997; McGowan & Klammer, 1997), all of the interviewees stated several times how important it was to have a champion for the BSC project to be successful. It was often stated as the most important factor as illustrated by the following quote by Interviewee 10:

> *"one of the key factors to the success, ... was to have somebody, a project officer who could actually do the work for us, because there was a lot of work, as there always is*

in any planning process. … trying to knock all the data down into one page, in simple language that anyone could walk into our facilities and have a fairly good idea about, that was really time-consuming, … Having the project officer made it a lot easier, I think that was really an important (factor)*."*

The importance of a champion was not more obvious than when Interviewee 3 stated that

"*In (organisation C) it died as soon as I (champion) left, so it was person-centric.*"

Having someone to drive the whole process was essential said Interviewee 3:

"If the person who was in charge of it, if they weren't driven if they weren't out there making sure everyone knew about it, … I don't think it would have done as well."

This was reinforced by Interviewee 9 who raised the issue that if you did not have someone dedicated to it and if they were not on top of it, it would disappear.

"Someone needs to own it. So, if … we didn't have someone allocated to this and owning it and thinking about it and moving it forward it would fall over. I don't know whether organisations that set it (BSC) *up do actually think about who will own it."*

The role of the champion was critical, as was their ability to liaise with so many stakeholders. Interviewee 5 discussed how the champion in the healthcare area near them (organisation D), worked with the community so much, they worked with the mayors and the councillors and the local GPs. Interviewee 5 in organisation E noted that they found it difficult because they were bigger and thought it would have been impossible for organisation F, to try and do that sort of level of consultation because they were even larger.

The level of the champion within the organisation was also important stated Interviewee 8:

"My involvement was as a project officer to implement it at the district level. And to get district compliance, and following the end of the project, that ran out of money and I went back to my day job. And they created another position at a lower level to drive that. The person in that position found it very difficult to negotiate with senior managers because they weren't really at a level of authority. And they found it very

hard to get compliance for lower-level scorecards. The officer that they put in, was hired two levels down because the district had to fund the person, and they couldn't afford a higher level, therefore this person didn't have the clout and the relationships that I had. And so, they couldn't get any traction with the key areas, and once the key areas stopped everybody else said 'why should we measure it'."

Interviewee 4 highlighted how important it was for the champion to be experienced. In their organisation D they had people driving the BSC that had been around for a while and done some quite high profile projects for organisation B and had established good networks so when they needed something it was easy for them to ask for help when they were unsure what to do.

Interviewee 1 from organisation A where the BSC is still in existence, noted that they thought it was so critical that they funded the driver (champion) from local funds after corporate funding was withdrawn for their project officer. Interviewee 1 stated that:

"Something different about organisation A is they kept funding me (driver) *after the plan was developed for at least another six months and in that time period I developed and led the cascaded scorecards with the executives …and I also kept up with the stakeholders to look at how we were going to implement the initiatives."*

Interviewee 2 (organisation B) also noted that:

"the other districts that didn't dedicate those resources, the majority of them, the scorecards started to wind down or halt in terms of reporting and evaluation and especially in regard to initiatives. Some of them never got off the ground in the first place but the people who kept somebody on board who knew about the scorecard, who understood it, seemed to keep going a lot longer than the people who had nothing."

Numerous interviewees observed that a champion was needed permanently for the adoption of the BSC to be successful. This was best described by Interviewee 10:

"This (BSC) *really took a bunch of extra time because we had to learn the stuff and settle on the measures and then really rigorously look back at the measures …. we did*

need that project manager for all kinds of reasons. I would say if you really wanted it to go on working forever you might need it permanently."

The way that the Champion went about the process of adoption was also identified as an important factor. Interviewee 3 stated she was not told to employ a communication strategy;

"I was told that I didn't need to involve the lower level people but after some research about how it actually works and how and what to do in order to have an effective implementation, I realised that I needed to communicate with and include all staff members".

Organisation A where the BSC continued, had the advantage of not only having a champion, but also strong support and encouragement from their top management. Interviewee 1 noted that a difference in the early stages with organisation A, was that the

"DM was studying a master's in business and was quite a charismatic leader who had a good standing amongst his executives in terms of his business ability."

The District Manager already knew about the BSC so once he knew that organisation B had selected it and it was coming to organisation A, he was selling it in a very optimistic and positive light. Interviewee 9 also emphasised the important role the Chief Executive Officer played in driving/championing the BSC project.

As can be seen from the above discussion, an internal champion has a very large impact, in fact all interviewees agreed it had the biggest impact on the organisations ability to be able to adopt, implement and maintain/embed a BSC within their organisation.

4.2.1.3. External Consultants

The third support factor to be discussed was consultants, as seen in other research (Madsen and Stenheim, 2015; Nørreklit, 2003; Kasurinen, 2002; Malmi, 2001), external consultants were mainly involved in the early stages of training the project leaders, and for a brief period to evaluate some projects. Interviewee 7 acknowledged that they had training through the external consultants. Organisation B engaged an external consultant as a kind of official consultancy assisting them with their training and questions and how to implement the BSC.

Interviewee 1 also noted that the external consultant was providing some input throughout the process and even when she moved to organisation B they were still providing consultancy input. Some staff who had originally been trained up by the external consultant, then developed training packages. From then on, the consultants were basically utilized as a sounding board. Interviewee 1 stated that:

> *"They* (consultants) *also carried out an evaluation,... to evaluate the success of the implementation across the organisation but ... the evaluation very much focussed on the success of implementing the processes of the BSC and what we were hoping to see much more was the success of the outcomes produced and the change produced by the scorecard and that was not easy to determine because each district had their own local level."*

Interviewee 6 noted that the hospital executive had a number of sessions with the external consultants explaining the BSC methodology to them and helping them to understand, how to run a strategy meeting and how to be the person that questions, the one that looks at the data and can be the Devil's Advocate and really getting good discussions going. Interviewee 6 observed that this brought about a change in the executive team. Interviewee 9 also noted that the external consultant helped them develop their first strategy map.

As can be seen from the above discussion, consultant involvement had a positive impact on the organisations choice to adopt and implement a BSC within their organisation. They were acknowledged and observed as helpful at the initial education stage, but interviewees had very little to say about their impact in terms of the implementation process or the ongoing reviewing and maintenance stages, other than them being used as sounding boards for ideas.

4.2.2. Organisational Size

The second factor in Model 1 to be discussed is organisational size. The impact here was mixed and at times contrary to prior research (Krumwiede, 1998; Bjørnenak, 1997; Clarke, et al., 1997; Van Nguyen & Brooks, 1997). Interviewee 10 believed that having experienced both organisation J and organisation F that the BSC was much easier to implement in smaller facilities. In hindsight Interviewee 10 believed that if you are going to adopt it in a big organisation, the adoption process should be undertaken differently. Interviewee 10 suggested that while smaller units definitely made it easier to implement, they caused some problems.

For example, it is easier in smaller places to block new ideas like the BSC if they wanted to, but the smaller numbers also make it easier to keep track of how people think the BSC implementation is progressing. Interviewee 10 stated:

> *"if you said well patients are pretty unhappy with us, alright how many complaints are we getting, well our records aren't that great, but you know as a DM I don't see that many, how many have you guys been getting? That stuff was easier in the smaller area. My overwhelming sense was that it was much easier in organisation J."*

This difficulty of trying to implement an effective BSC in large organisations was also noted by Interviewee 3. She thought that for organisation B, being so big and so diverse and so spread out over many areas, their scorecard was a '*little motherhoody*'. Organisation B tried to encompass everything they do in their BSC, which is contrary to what the BSC literature says about how to create a BSC. The theory (Kaplan & Norton 1992, 1993 & 1996a) states an organisation should focus on only a few strategic areas at a time. This led to poor modelling and a failure to achieve the more positive outcomes than they did. This was noted at their SWOT meeting.

Interviewee 4 suggested that people in a rural area saw themselves working in an acute setting, which in fact they do not, they work in a much more multi-faceted setting where acute care is less than 50% of what they do. In the rural area they were more involved in outreach services and primary care, than working in a secondary or tertiary area. This confusion of roles and expectations could lead to poor decisions and allocation of resources within the organisation similar to what occurred in organisation Z (refer 'competing priorities' later in the chapter).

Rural areas had additional issues. In one district three of their major towns were on the border of two states. They received funding from one state but serviced people from the other. This created problems in the discussions around measures for the BSC as to how they measure and report on how many people come over the border and about how they will bill the other state for the services provided to those people. Where the rural organisations were near a state border additional issues faced included: the need for dual registration of doctors and nurses to deliver health services to some communities in the other state; the ambulance service will only support certain areas and not others, because the ambulance service was run by different organisations in each state.

Organisation D (rural area) had several issues unique to this organisation. For example, shared care, i.e. a doctor at one town takes a pregnant woman through to a certain stage, then sends her to another town to deliver, then she goes back to the first town for post-natal care. So, they needed good working relationships and home community care services to effectively care for this patient. This raised the issue of how to measure these essential services and management of the stakeholders involved in the provision of the necessary services. Different districts had different ratings according to what services they are allowed to provide, and when they needed to send a patient to another district or organisation for treatment. The management of these stakeholder relationships was a major issue when trying to choose appropriate measures for the BSC and when reporting.

Hence, there was evidenced provided that an organisations size had both advantages and disadvantages when it came to implementing the BSC.

4.2.2.1. *Complexity & Diversity*

Interviewee 8 from organisation H a large organisation observed that the things that caused them grief were: sheer size of the organisation, and complexity of the organisation, the inability to sustain the change effort because of other competing political interest and things that emerged that they had no control over. Interviewee 6 stated that for organisation G what caused them problems was they had 5,000 plus staff. They also had the added issue of creating a combined BSC for two large hospitals. Organisation F and G were one district because they serviced the one population. They hoped to form partnerships and really work together. But unfortunately, the executive teams did not feel that closeness, and even though they went to each other's meetings, the partnerships did not evolve.

They were two very different organisations and while they came together to come up with their objectives, they ended up with separate measures. They saw this as a downside, but the BSC should result in different measures for each. Combined hospitals also caused problems for organisation H who had over 900 beds on multiple campuses. Interviewee 8 stated that while this was currently unusual, it was going to be more the norm after the restructure of organisation B, as they planned to amalgamate districts.

Having multiple sites did not seem to be the issue for organisation D. Interviewee 4 observed that they had only a few environmental factor issues even though the health services they provided were offered at four different sites within the district and included mental health. So, while they were geographically diverse the executives or senior staff from those rural areas came to the single executive meeting, so the information was brought centrally to the executive committee and decided upon together. Interviewee 4 also discussed that the metropolitan hospitals were so big and their activity so large that they had to focus just within the hospital and getting processes right there. Interviewee 4 could see it failing within the big hospitals because their surgical cluster alone would probably be the size of organisation D. So, interviewee 4 understood why organisation B implemented it out in the rural area first to see how well it went and then gradually staged it up to the bigger districts. Interviewee 4 thought the BSC was a good tool for the rural areas.

As can be seen from the above discussion, the impact of organisational size and complexity appeared to have different impacts on the different organisations ability to be able to adopt and implement a BSC within their organisation. The overwhelming feeling was that it was extremely difficult to implement in large organisations, because of the complexity, diversity and competing priorities within the one organisation. But the rural, smaller areas also had other challenges and complexities that needed to be recognised within their strategy and hence BSC. Also, that while it may appear to be easier in smaller organisations because of less complexity and divisional issues, it would also make it easy for dissenters to block the BSC at any stage of the adoption or implementation process.

4.2.3. Compatibility

The third factor in Model 1 to be discussed is compatibility. In this research, (refer 2.4.3) compatibility is defined as 'the degree to which an innovation is perceived, to be consistent with the existing values, past experiences and needs of the potential adopter' (Rogers, 1995; Vaz Lopes et al., 2015). Originally this researcher also thought that the past experience with the BSC and with the Information technology would be an important aspect behind the extent of the impact on the BSC adoption. Although, during the interviews it became obvious very quickly that Information Technology compatibility was a separate factor on its own and will be addressed later. The Champions or District Manager experience with the BSC did not

appear to have a significant impact on the extent of adoption of the BSC but did have some impact on the process of BSC adoption.

As can be seen from the following discussion, there were three traditional values/mind sets and old school views that impacted the extent of adoption of the BSC within many of the organisations: focus on finance, impost on day to day business, cynicism about 'fads'. These three themes impacted the view of compatibility of the BSC with the organisation's internal values and culture. Hence, the champions had to challenge these organisational mindsets and values before there was any chance of developing a successful BSC.

At head office (organisation B), noted Interviewee 1 the traditional emphasis was on financial management. Clinicians on the ground level and staff throughout the organisation felt that the managing of finances was perhaps at the expense of other parts of the organisation, like the workforce and service delivery and consumer outcomes.

Interviewee 8 stated to the credit of the previous Director General, who recognised that the organisation although it professed to be about people, it only measured the bottom line. It was very much an economic rationing model. Interviewee 8 stated the following:

> *"It wasn't well let's work out what we need to do and do it. It was let's work out how much money we've got, then we do the best we can and the most we can with the money. When the money runs out, we stop treating people. And that is part of the culture which has led to the subsequent revelations of organisation Z and elsewhere."*

Interviewee 8 discussed that evidence-based practices is very highly regarded on the medical side of the business but on the planning side it was very much the best orator got the finance allocations in the budget.

Organisation B realised that they could not remain focussed only on finance they also had to be focused concerning desired outcomes for their stakeholders. They had to focus on their staff, and on their processes and recognise that the desired outcomes may not be achieved best by doing it the cheapest way. So, this change of focus was a real driver for organisation B to bring the BSC in. There was a recognition throughout the whole organisation that they could not just keep doing what they had been doing. So, for example, in organisation B, the budget

at the time of research had increased by 240% from the previous Director Generals days, and part of that definitely flowed from the revelations of the rationing culture that had been in place prior to the organisation Z revelations.

Interviewee 8 observed, there were ten corporate priorities that didn't even make it onto their district priorities. There were 13 corporate priorities, and 10 district priorities. So, there were only three priorities that they had a common focus towards: to balance their budget, better communication with stakeholders, and to effectively plan their services and workforce.

> *"They were the things that were critical and the things we should have focused on. But because we had to include these other 10 things and measure them, people were collecting measures about the things that had no relevance to them. And they saw them as an impost on their business."*

As mentioned earlier another mindset that needed to be overcome therefore was that the BSC was an impost on their day to day business. Interviewee 9 said that,

> *"clinicians particularly doctors are driven on treating the next patient and solving the next patient's problem, they are not worried about the one next week. It is very hard to get them to think strategically and so that makes it tricky"*.

> Interviewee 9 went on to say:

> *"So, you have to work with them and understand what their drivers are (to) find … a common view, but there is a lot of self-interest that comes from clinicians. Self-interest and self-preservation comes from clinicians, which you have to work through before you can get too far. It gets to be really hard because you know one layer below the executive you will cop that. And you end up in these day-to-day operational arguments when you are actually trying to get them to think past that"*.

Interviewee 10 noted that at organisation F people believed they knew what the issues were, and they did not believe the BSC was the way to deal with it, that there were better options for it. She heard comments about how the money they have spent on doing the BSC would be better spent on two or three more operations. Despite these comments she really did overwhelmingly believe that their BSC was helping them deal with the legacy of a number of

years of trying to '*catch their tails*'. Organisation F had a very high level of cynicism about '*well this is just another one (Fad) that we are going to sit out'.* They were going through the motions of creating a BSC but did not

Interviewee 7 stated that she listened to ex nurses

> *"who got absolutely abused for not folding or tucking in the bed properly or having the 'band' at the wrong end but in the same conversation one ex nurse saying she still thinks that's an important thing".*

So, there were some real cultural mindsets that they had inherited just from the way those professions had operated for a long time. Interviewee 7 felt they had moved forward from that, but they still have to remember there are still some in their organisation that have come from that old school mindset that came from the past culture.

Another evidence of cultural mindset was observed in organisation I. Interviewee 9 acknowledged that in her organisation the portfolio guys were very precious about their portfolios and did not want anything to 'grey' that. Interviewee 9 saw this as being the difference between strategy and structure; and felt they may need to revisit their structure.

Interviewee 1 discussed that another important factor concerning cultural mindset was the degree of openness in the executive. She noted that in some cases she could clearly see that there was not a culture of allowing people to openly put forth their ideas and they could not necessarily have open discussion and debate about the best course of action. She noted that there was also a culture of '*it's OK to add to business but we don't take anything away'*. This created problems within the organisations that just attempted to add the BSC onto what they were already doing, rather that replacing the old Performance Management System with the BSC. Within these organisations this led to people complaining about the additional workload, as the same information was being captured elsewhere. So why were they wasting their time doing it again, it was already being reported in their Quality framework.

As can be seen from the above discussion, compatibility had quite an impact on the organisation's ability to be able to adopt and implement a BSC within their organisation. Early

in the interview phase it become obvious that the consistency with the existing values in the organisation was the important aspect to be captured. This research was unable to capture whether prior BSC or information technology experience had a positive impact on BSC adoption, because only one interviewee had, had prior experience with the BSC**.** As can be seen from the discussion above consistency with existing values had a large impact on the extent of BSC adoption both at the adoption and implementation stages.

4.2.4. Information Technology (IT)

The fourth factor in Model 1 to be discussed is Information Technology impact. The Information Technology factor was found to be multi-faceted issue within the interviews, with differing views of its impact on BSC implementation. This factor is deserving of more research, as many different aspects of Information Technology were raised by the interviewees, beyond the scope of this research thesis. The four aspects included in this study are quality, compatibility, usability, and Quality Management Framework.

4.2.4.1. Information Technology Quality

One concern in healthcare was raised involving the issue of data overload. Interviewee 11 observed:

> *"In any health system you have heaps of data,…but whether that data tells you anything is a different thing". "So, we wanted to get back to a point where they didn't get a lot of information, they just got a one-page snapshot and if there wasn't too much red on there, you're running all right".*

So, the BSC was seen as a help to control and minimise data overload and focus organisations on the essential measures and priorities.

Another aspect was the lack of access to the necessary information in an easy and timely manner. Interviewee 7 stated:

> *"that organisation B is data rich in information, they have to collect a lot of things, but they found it hard to get the information out. So as far as the HR goes that was a bit tricky, we often wanted to complicate the measures."*

Interviewee 1 observed that *'there wasn't a lot of readily available data at the district level apart from activity related data'*, which made it harder for them to get the needed information for the BSC measures. To achieve the quality of information technology required for the BSC was quite a challenge for several of the organisations studied.

4.2.4.2. Information Technology Compatibility

Interviewee 10 thought that the systems element of an organisation was also very, important because without their systems functioning for their people and therefore for their consumer their goals would not be achieved. This had the potential to have a really heavy impact financially, on the organisations bottom-line. Interviewee 10 noted the following:

> *"Because the reality is the systems are set up for activity and financial not for monitoring a partnership or being environmentally responsible or any of those other things that you have to do as an organisation."*

The interviewee felt that in a large government department the systems are so cumbersome, compared to what they observed in the private sector, and the time spent on running some of these accountability systems was really huge. The interviewee used the word 'systems', as a whole view, including people, processes and programs. The concern was that some of the systems were really basic, like providing people to translate doctors' reports on to paper, when there were other systems available to complete that task which would have been more cost-effective and freed up people to provide a better quality of patient service.

An example discussed, was concerning the age care sector, which is part of what organisation B offers. It was noticed that the quality and the quantity of accountability measures that were in place really drew personnel away from the coalface of looking after patients; and that applied to both government and non-government agencies settings. Interviewee 10 strongly felt that it needs to be looked at, not that there should be high-level accountabilities but a recognition that both kind of systems really impact on '*how people can get on and do their job'*. The interviewee knew that organisation B had identified a whole range of different activities that could be done differently, to make it easier for the staff to do their job and for patients to get in and out of the beds, and surgery etc. For this organisation that sort of collection of the data for the BSC at that time was very cumbersome and time-consuming, and difficult to interpret and consequently they used a lot of anecdotal stories in their reporting.

Also accessing data from the systems being used at that time was difficult because at the time the systems didn't speak to each other. Quite a lot of the data was actually hand collected, it was really clunky, and those in management who were working with the data had really little confidence in it. Interviewee 10 stated that

> *"people would say this is the correct number of patients who were admitted for whatever, so when you were hand collecting or trying to pull something out of a system that won't go down to specifics - it was really clunky and difficult".*

The lack of easily retrieved data did not necessarily hamper the discussions it made them look more at what they believed they knew and whether what they believed they knew was actually right. The interviewee felt the technological side was a hamper though, through the lack of confidence in the accuracy of the data. She felt it was difficult to get good-quality data out of any system at the time. Interviewee 10 observed that,

> *"everybody argued at every level. They would talk about the financial data that they got out of this system and everyone would know that the data was inaccurate, then they would go to another one and they would say well who knows if that is true; and that just kind of thing ran through the whole organisation."*

There was a new Human Resource system that had come online for them, and it was still not fully functioning, and therefore they found the technological side was difficult. So information technology compatibility was definitely a barrier or challenge to BSC implementation.

4.2.4.3. Information Technology Usability

Another aspect of the information technology factor was pertaining to people's experience and ability with Excel which was the main platform for reporting used by all but one of the organisations interviewed. The usability of the technology utilised was considered important.

Interviewee 2 stated that:

> *"the reporting mechanism was a problem from the initial stages. There was a lot of interest in whether having a linked database might actually improve the sharing of information between districts at a zonal level and between all districts and zonal levels at the head office level. The interesting thing has been that peoples' Excel skills which is what the original reporting format was in, actually held back a lot of districts from being able to report effectively because the majority of ... the staff*

at the time did not have proficient Excel spreadsheet skills to report efficiently so they were still trying to learn how to use Excel and report at the same time and that was blowing out the administration time and increasing peoples' frustration."

Whereas other organisations praised the advantages of reporting through Information Technology means and the easiness of reporting once the system was in place.

Interviewee 6 noted that:

"when we had district strategy meetings, it was just a matter of going into it and updating the information and it would spit out graphs and a whole range of things. From the top level, the DMs they could see everything, and they could see where things were on target and/or not on target. There were little smiley faces and stop signs and it helped -- if you were going to a meeting you could just print off the template and it was a real tool and easier from a reporting perspective and also for the manager and sponsor to view how things were going."

Other information technology issues raised in this aspect were clumsiness of the system to use, lack of understanding of the system or reports, level of user friendliness, level of integration and complexity of the measures. Hence, quality of Information Technology was identified as an important factor that either hindered or enhanced the BSC implementation.

The researcher's conclusion is that the research question around Information Technology needs further examination beyond this study, as Information Technology has had differing impacts within each organisation.

4.2.4.4. Quality Management Framework

The other Information Technology factor to be discussed is the Quality Management Framework. Due to the nature of healthcare there is an emphasis on quality and given the many government reviews at the time of the research, this meant there was a number of quality frameworks developed and accreditation quality performance reports required. These quality frameworks had a negative impact on the implementation of the BSC, because they became a required part of accountability in healthcare and some of the organisations felt they were doing this very well and therefore do not see the need to frame this within the BSC.

In connection with this issue Interviewee 1 stated that the problem was

> *"that as soon as accreditation came around and a quality co-ordinator was appointed; the strategic planning framework and management was set aside, as it was seen as a lower priority. The higher leverage was to get accreditation to stay functioning versus, a strategic planning framework which was seen as an optional extra when competing priorities came to the forefront. Also, in a lot of cases they didn't see that the resources were tied strongly enough to the BSC framework but were to the quality framework".*

In some of the organisations the quality framework seemed to have been just substituted into the BSC as they just added their quality measures to the existing standard financial measures. Hence the linkages and the advantages they could have had were lost.

Interviewee 2 stated that the BSC had helped them improve their quality reporting.

> *"In this case, the balanced scorecard framework and methodology clearly drives continuous quality improvement across different sectors of the organisation so* (it) *drives continuous quality improvement and customer outcomes, and financial outcomes, and service delivery outcomes and in workforce outcomes, ... for our staff. So, the reason I say this is because in the past we've had systems where technically you're supposed to report against a framework like a continuous quality improvement framework but that hardly happened across the organisation".*

As can be seen from the above discussion, the existence of a quality management and reporting framework already within the organisation, contrary to expectation, actually had a negative impact on the extent of adopt and implementation of a BSC within some organisation. While other organisations reported a positive impact on the BSC implementation. The existence of the quality management and reporting framework already, had a negative impact on the extent of BSC adoption in the organisations where they saw the BSC as a 'Fad', and incompatible with their culture/values. Whereas the quality management and reporting framework had a positive impact on those organisations that implemented the BSC as part of a complete change of performance management system project.

4.2.5. Perceived relative advantage

The last factor discussed is perceived relative advantage. All of the interviewees perceived that the BSC had relative advantages over the old systems employed. Interviewee 7 liked the BSC so much that they later used it in other government departments and observed that a number of other government departments had also started using it. The interviewee would not call it a 'Fad' but recognised it as a 'tool'. They noted that everyone was picking it up at the time and they jumped on board with this new tool that was promoted to do wonders for them. The interviewee felt that it made life simple, structured and grounded. Organisation G were keen to take it up because they noted that in organisation J who had been running the BSC for a while had achieved many benefits from it. Interviewee 11 noted that managers …

> *"liked that the information was easier for them to read and they could run it off at their own pace".*

Other advantages and benefits that were mentioned by Interviewees, 1, 3 and 7 included that: it gave them a more streamlined direction in their organisations. Everyone, even in rural areas and people at all levels of the organisation including the food services people, knew about the BSC management plan. Interviewee 7 noted that within organisation G that …

> *"when the DM went for a walk around they showed her what they had done that aligned to one of the objectives on the plan, that was relevant to their area and that they had actually saved all this money, ... by doing something with their store room."*

Interviewee 7 felt that the concept of the BSC allowed them to market the direction of the organisation really well, especially with the map - theirs was '*very simple to read*'. The interviewee continued by saying,

> *",,, if you cascaded it properly everybody had a purpose towards a bigger outcome that was relevant to their work area".*

Interviewee 7 acknowledged that the BSC communicated well the idea that each employee had a part to play in achieving the organisations goals. It made the employees think in relation to the big picture and kept people coming back to that picture, people traditionally had not thought about the big picture.

Additional advantages were outlined by Interviewee 6 who thought it was a way of getting the executive management teams of each district to start focusing on strategy and realise that they had finite resources and could not just keep asking for money and expect to get it. They had to look at their processes and how they could gain efficiencies and work on proactive perspectives a little bit at a time so that they could make change overall. It was a way to get the districts focussed more on where they were going for the next three to five years. To take a proactive response rather than just stamping out fires wherever they occurred around the place. These were some of the reasons why from organisations B perspective, they thought that the BSC would provide advantages over their old systems and processes.

Interviewee 6 saw the BSC change their executive team, in that they were a lot more proactive. As the sponsor (executive member assigned the responsible for particular measures on the BSC) in one area of the measures in the scorecard achieved success it led to competition amongst the sponsors of the other areas to try and succeed as well. It was also seen as something that the nurses were prepared to engage in because it was quite visual, having the BSC in the form of a map made it easy for them to understand.

The BSC not only had advantages for public organisations but also private organisations, as noted by Interviewee 9:

> *"We are a mission driven organisation, and we weren't doing enough to understand the non-financial components and that's not a surprise it is the reason a lot of people thought the BSC was useful".*

Interviewee 9 observed that the BSC helped their organisations integrate with a common strategy. He stated that one advantage of the BSC was that the organisation had moved from being multiple different hospitals to one incorporated organisation, and it was now seen as there was a need to represent the whole organisation as one. The strategy map was viewed as a way of looking at what was important across the whole organisation, rather than as individuals.

Another advantage noted by Interviewee 11 was that they observed that the BSC allowed them to move towards a one-stop shop, the old system recorded what the patient was in the hospital for, but it did not record clinical data. They changed to collecting their BSC data in a

management reporting system, they stopped using Excel because now all their data was interfaced. This allowed personnel to access all necessary data on any given patient through the one system, governed by access protocols for privacy. Selling the advantages though was not an easy task for the Champion, especially in the early stages, as people within the organisation saw it as a 'Fad', and they experienced a divisional silos culture.

So as stated earlier the interviewees did view the BSC as having several potential relative advantages over their old systems, including, the impact on their strategy, measurement of what was important to their organisation, a way of viewing decisions as long-term, rather than short term, and comprising a system that allowed them to measure performance of management, divisions and districts. It also provided them with an excellent communication system, as well as an attention directing, planning and forecasting system that could enhance their overall performance as an organisation. The organisations that successfully implemented the BSC maximised the above advantages, and also used the BSC as a strategy driven change project. More discussion of these roles and advantages are outlined in chapter 5.

4.2.6. Findings for Research Question 1

From the above discussion relating to Research Question 1, each of the first three support factors, top management support, champion and consultants all had a positive impact on the BSC adoption and implementation but to a differing extent. This is consistent with prior diffusion on innovation research. Rogers (1983) suggested that the following characteristics influence the innovation diffusion process: the process by which an innovation is communicated (i.e. management style, support), and the characteristics of those who are promoting the innovation (i.e. consultants, champion).

By far the role of the Champion, and their managerial competence and the process of implementation that they used had the biggest impact on BSC adoption and implementation. Consultants had only an observable impact at the beginning, in terms of selling the relative advantages of the BSC and education surrounding the BSC concept and the why to implement the BSC but had a minimal impact on the developmental or implementation stages. Top management support was identified as having a relatively large impact both for adoption and implementation of the BSC. Although there was evidence to suggest that as long as the owners

of the performance measures were onboard, a change of District Manager or top management resistance could be overcome and a successful implementation of the BSC could be achieved.

These findings are also consistent with Smith (2000) diffusion innovation research which identified the following innovation characteristics as influencing adoption and implementation of innovations (similar to the BSC). Aspects of the innovation found to be relevant in this research was that most organisations saw the BSC as an administrative innovation. Thereby its impact varied from radical (complete change) to incremental and central (strategic management/measurement system) to peripheral (compliance measurement) depending upon the support of top management, the champion and/or the consultants.

Also, consistent with Smith (2000) compatibility; complexity and relative advantage all influenced the BSC adoption. In this research organisational size had a mixed impact on the organisations study and at times contrary to prior research (Smith, 2000), it had a negative impact. Compatibility with the organisation was a major part of the interviewees discussion, especially the fact that there were three traditional values/mind sets and old school views that impacted the extent of adoption and implementation of the BSC within many of the organisations: 1) focus on finance, 2) impost on day to day business, 3) cynicism about 'Fads'. These three themes impacted the view of compatibility of the BSC with the organisation's internal values and culture.

Organisational size and diversity seemed to have a different impact within different organisations. Within the successful organisation the size issues were overcome as part of the adoption process employed by the Champion. The issues pertaining to size and complexity of structure were discussed by all interviewees, some thought it had a negative impact and made it extremely difficult, while others thought that the biggest gains could be made in the larger organisations, as they had the resources and could capitalise on the synergies of departments working together for a common strategy. Although organisation H tried to deal with their complexities by using complex measures, this created problems for the BSC implementation and made it too difficult for the top managers to understand and even harder to then communicate throughout the rest of the organisation.

Complexity and diversity had a different impact on the BSC within each organisation similar to those identified with the size of an organisation. While the theory would suggest that the more complex and diverse the organisation the more likely relative advantages can be achieved and because resources are available this diversity was expected to impact positively toward BSC adoption. However the complexity and diversity allowed for the divisional silos to make the process difficult, as each area (division) wanted to only see their measures on the scorecard and found it hard to come to a common consensus on what measure should be included initially.

Also, consistent with diffusion innovation and resource based view literature (Barney, 1991), information technology quality/compatibility/usability was also a factor that had both a positive and negative impact on BSC adoption and this factor is deserving of more in depth study. As some organisations were able to achieve a one-page summary that was extremely useful and used by the organisation and appreciated by the employees and external stakeholders. Other organisations struggled with too many and too complex measures and systems. Inconsistent with prior research (Brown et al., 2001), the existence of a quality management framework had a negative impact on BSC adoption in a number of the organisations that were unsuccessful at implementing the BSC as they saw this framework as more important than the BSC, because government funding was typically linked to meeting these requirements and they did not want to report twice.

In terms of the technological factors, compatibility had a mainly negative impact on the successful implementation of the BSC, especially in the areas of compatibility of existing cultural values, and past experience of the organisations. The quality management framework impact was not as originally expected by this researcher. It appeared to have a negative impact, as organisations had to already follow and report on so many Department of Health policies and guidelines including Clinical Services Capability Framework (CSCF), Clinical Guidelines and The National Code of Conduct for Health Care Workers. Then a 'Review' demanded certain quality measures be mandatorily reported on, and people did not want to have to report on the same data twice.

As for information technology quality, this factor is deserving of more research as different aspects of information technology had an impact on BSC adoption within this study. Not only

was the information technology quality important, but so was the information technology understandability and usability.

It was difficult to truly capture the relative advantage factors because this BSC implementation process was mandated for most of the organisations studied. As a consequence of this mandating the organisations did not always clearly see the relative advantages and need for the BSC, therefore making it hard for the Champions to handle the 'buy-in' and 'divisional' issues. The Champions who made a concerted effort to start by clearly communicating the need and relative advantages of the BSC were able to successfully implement the BSC.

As a consequence of examining this BSC adoption model it became clear to the researcher that the BSC adoption model needed to be supported by an appropriate implementation process to achieve successful embeddedness of the BSC within an organisation. Hence in answer to Research Question 3a and Research Question 3b, a second model was proposed outlining the critical success factors split into four categories that impacted the successful implementation of the BSC within healthcare organisations (discussed in section 4.4).

Having discussed Research Question 1, the next section will address Research Question 2.

4.3. *Organisational & Healthcare Characteristics/Culture factors (RQ2)*

From Research Question 2 below, the following organisational level and healthcare sector factors were identified as impacting either on the extent of BSC adoption or impacted on the critical success factors affecting the implementation process. First, most of the organisations studied had the BSC mandated upon them. Second, the organisational behavioural impact factors were internal divisions, and relationships. Third, the healthcare characteristics (culture) organisational impact factors identified were competing priorities, and strategic vs operational planning. Fourth, the sociological impacts of an ageing population and workforce shortage and the politicisation impact are discussed.

RQ2: What key characteristics / cultural factors have influenced the BSC adoption and implementation process including the behavioural, organisational, sociological, and political impact on the BSC in healthcare organisations?

4.3.1. Mandated BSC Adoption

Something unique to most of the healthcare organisations that were interviewed was that they had the BSC mandated upon them, rather than chosen by them, and this was seen to have a negative impact on its adoption. Interviewee 8 said that

> *"Organisation B pursued the BSC quite vigorously and used a top-down approach to mandate it"* (noted by Interviewee 6 and 4 as well).

The interviewees acknowledged that the BSC was observed as a mandatory task which was driven by the political agenda, not necessarily by the business of healthcare agenda. It was also observed that there were certain priorities/goals that were very important from a state-wide perspective that were not important from a district perspective. Interviewee 8 understood that with the BSC they needed to start somewhere so it seemed natural to start at the top, but he felt there was no room to negotiate any form of modifications at the lower levels. Therefore, once the pressure corporately came off the BSC, people reverted back to business as usual.

In several organisations there was this resignation to the fact that it was expected so they better do it. Interviewee 7 stated that people just took it as a *"mandated thing"*. So, they just did what they were told. Interviewee 5 stated that the BSC was received with different enthusiasm by different executives and a few of the executives thought …

> *"Well, it's a process and maybe a process that was going to be sustainable and we have to do it and therefore it was done, and some districts actually had some good outcomes from it".*

Interviewee 3 noted in organisation C everyone's first opinion was

> *"it is corporate office (initiative), so we don't want anything to do with it."*

Initially they were against it because it was not seen as a project developed within the district, they saw it as a head office project. If someone within the district had said, "*Let's do this*" the interviewee thought people would have been more on board.

The fact that this mandate changed and was unclear over time also had a negative impact on the adoption of the BSC. Interviewee 2 thought that …

"because there wasn't ongoing communication from the highest level of the organisation that it was a must do activity and that it was still supported by the executive team ... (at) *corporate* (head) *office, that confusion ensured. They sent those messages out consistently in the first year during development of the plan but in the second year they did not see that that they needed to keep doing that despite of the questions they were receiving".*

When Interviewee 2 first went to organisation B they contacted the districts and asked them what was working and what was not and what organisation B needed to do at head office level to help them and support them and most people said,

'*does the Director General still support the framework?'*

Unfortunately, the managers upstream from Interviewee 2 did not see the relevance of keeping the BSC moving or the need to keep on reminding people that it was not a passing fad.

Hence, the fact that the BSC was mandated onto all but one of the organisations studied did have an influence on the attitudes of some of the organisations, as some perceived the BSC as being only a 'fad' not a useful measurement and management tool.

4.3.2. Organisational Characteristics affecting Implementation & Behavioural Impacts on the BSC implementation

The first group of organisational characteristics to be discussed involve the behavioural aspects within each of the organisations that had influenced the BSC implementation process.

4.3.2.1. Internal Divisions

Interviewee 8 stated that in organisation B

"the culture of medicine, which drives a lot of what action happens on the ground, is a highly individualistic culture. And there is a long history of dissent amongst it, where if doctors don't want something they just stop, they leave, they threaten, they resign, they boycott, and they threaten to go to the papers".

Interviewee 8 also thought that if they did not get those major subcultures on side, the doctors and the nurses and the allied health professionals then it would not happen.

In organisation H said Interviewee 8 the …

> *"nurses came on board really well, the allied health people half and half, because they felt like the poor cousin. And they saw the BSC as a way for them to get what they needed, so they bought in, but they fell at the first hurdle. As soon as there wasn't any money coming in the first budget, they packed up and walked away."*

At organisation H they were singularly unsuccessful in engaging enough of the doctors. They got some of the respected top doctors on board, but the vast majority of the doctors just wanted to do what they did every day. They did not want to talk about the BSC, just wanted the funding. They wanted to just do medicine and were not interested in talking about what would happen in five years' time.

The issue Interviewee 7 saw was the professional prioritising of measures on the scorecard, especially in identifying their main drivers and outcomes. She noted that the measures

> *"needed to* have *clinical priorities, not just based on 'the doctors want this' and the 'nurses want that'. The priorities needed to be based on patient outcome not what the doctors, nurses, and everybody in an organisation wanted to see on the BSC".*

Interviewee 7 thought that one of the issues was they worked in a place that works in silos, they have a divisional silo, professional silo, and team silos. They do it their own way and they are happy with that, but the BSC was asking everyone to play friendly with everyone else in their division and across divisions and people really did not like doing that. Interviewee 4 observed that because it was mandated the trick was to get buy-in from all the players so that the outcome and the design of the BSC was balanced.

A common observation was that there was this real difference of opinion between doctors based on their college of origin. Interviewee 10 observed there were many squabbles that went on while she was at organisation F because there were some '*very big political heavyweights*' as doctors in that organisation. Interviewee 10 believed that was always going to play a part, *'Who was head of which college and holding what powers?'.* Interviewee 5 also discussed that medical doctors have their colleges they graduated from all of which have a set of quality standards for them to achieve and report on and therefore they do not want to have to go to a different tool. Interviewee 9 and 4 reinforced this that they did not go down very far in a

healthcare organisation before they got into clinical operations issues. They have a complex manager model because if they are clinicians then they have an allegiance to their profession and they have an allegiance to the college that they belong to because of their specialty and this influences their perception of whatever the organisation should or should not be doing.

Unfortunately, these divisions made it extremely difficult to get common consensus on the main strategic objectives, or the measures themselves. These difficulties and the divisional barriers were extremely apparent during the observations undertaken by the researcher. During the workshops run by the organisations with regard to trying to establish the initiatives and associated measures, the divisional silos were immediately obvious. The doctors were definitely the hardest silo to get onboard the BSC project and felt their priorities/measures were more important compared to the nurses and allied health priorities/measures. Their focus was on the day to day operations and how to source more funding for their particular agenda. It was hard to achieve a focus on the long-term outcomes, when the doctors were so short-term focussed. They were all used to having a yearly budget and knowing how to manipulate and vie for their share of the available funding. This strategic, long-term focus was a foreign way of thinking for all the divisional silos, it was all about funding and day to day operations in their way of thinking.

The researcher observed during a meeting two individuals from different silos, who got into a very heated discussion over a possible chosen measure for their BSC. As the conversation progressed it was obvious to the researcher that they were actually talking about the same measure but saw it only from their silos point of view. With appropriate questioning the two individuals finally realised they were trying to capture the same aspect.

4.3.2.2. Relationships

Interviewee 10 who worked in both organisation F and J said what was really different between the two organisations was *"relationships and respect"*. The people in organisation J actually liked and respected the Director General and some of them would have *'crawled over cut glass'* if he asked them to. Interviewee 10 went on to say …

"The DG was there, and he said what you guys in the rural are, is the pilot for the BSC and you know what - I really wish you would give it your best shot."

When Interviewee 10 went to the organisation F that same level of agreement and respect was not there. It was there in pockets, but it was not there to the same extent.

"*There were some really big battles between some of the doctors and the Director General and some of those were played out in public through the (media). ... the respect that people had for that Director General was not necessarily replicated right across the state. And certainly, there have been some fairly inflammatory incidences that had occurred. There was a view that in some cases the Director General was going to 'bounce' people around for doing certain things.*"

The interviewee also observed there were issues in terms of staff and getting a fair and equitable pay rise. These observations appeared to have had an impact on the buy-in for the BSC implementation process.

4.3.3. Healthcare Sector Characteristics affecting Implementation & Organisational Impacts on the BSC Implementation

There are certain organisational characteristics of healthcare that have impacted on both the adoption factors and the implementation process of the BSC. These characteristics are strategic vs operational plans, aging population and workforce shortage, politicisation and mandated project, each of these will be discussed in this section of the chapter.

4.3.3.1. Competing Priorities

Interviewee 6 identified that a critical factor in the adoption process of organisation B and associated organisations, was that their focus was changed because of the need to address an immediate problem. What contributed to the failure of the BSC implementation for them was that politically it was not a very good time, and the people in organisation B, the executive management team who were driving the process, and who saw that it was very important to organisation B, then found themselves in trouble elsewhere and other problems took priority and a new executive team commenced. So, the BSC was not high on the agenda anymore, because of what had happened politically especially; the bad press, and incidents like what happened at organisation Z. (At organisation Z several incidents occurred that led to significant

negative media coverage). Hence a lot of the districts reverted back to before the BSC. It became difficult then to attract staff, and difficult to refocus on the BSC because organisation B's name was tarnished quite a bit. Organisation B was also receiving bad press concerning other issues including, ramping at emergency departments, lengthy waits for elective surgery, rankings of healthcare facilities, and performance measurement issues.

Interviewee 7 noted that they had created a BSC just before the whole organisation Z issues and restructures and reviews, but she thought that from an organisational perspective everyone was under a bit of turmoil as to whether to proceed with the BSC. Interviewee 8 stated that in organisation H the *"BSC was already running out of steam before Z, but Z killed it as a project"*. Interviewee 4 reiterated that with all the organisation Z business and because of the reports from the Review and Inquiry, the change of leadership and a whole range of things, the BSC was scrapped. Even Interviewee 11 whose organisation was not linked to organisation B acknowledged that the new legislation and accreditation and the organisation Z issue impacted all the way through the other organisations. Interviewee 5 noted that Organisation Z engaged in the activities that created the issues, because they could get more funding out of it but they were going beyond their expected domain (capability) to achieve that.

Interviewee 4 also noted that there was a service capability framework, which set out what level of health services each healthcare centre was accredited to provide. For example,

> *"if you were not delivering 240 babies a year, should you be providing midwifery services? If you were a level 1 or 2 emergency department, if a patient presented with multiple traumas, then you ventilated the person and called an emergency medic to transfer patient to a higher-level facility. Also, if a neurosurgeon was visiting, they still could not perform neurosurgery because your healthcare centre was not capable of providing the necessary support"*.

It was the lack of adherence to these frameworks combined with prior poor Performance Management System that allowed the organisation Z outfall.

4.3.3.2. Strategic plans vs Operational plan

People at organisation B knew they needed to look into the future and plan, to stop some of incidents that were generating bad press and poor outcomes. This strategic viewpoint did not help them immediately though because when something new came up, some operational issue

that they must address because they are under pressure to address it from the community and/or from politicians that operational issue took priority over the strategic focus. Hence, they struggled with being able to plan for the future and not have, people derail that planning to meet changing consumer expectations. There are a lot of lobby groups in health as well as competing for a space on the agenda and trying to, move the organisation in a particular direction. Interviewee 1 reflected that

> *"in the past, it was very common knowledge that people drafted the strategic plan and it literally sat in the drawer of the District Manager".*

It was a compliance exercise. There was nothing more really done with that strategic plan and it was not even really tied to operational planning at all.

Interviewee 2 discussed that there were competing priorities in terms of operational issues that were going on within their district and their executive was not able to focus on strategy. This interviewee also noted that numerous other districts did not even have separate strategy meeting and operational meetings, they would mix it all up in one meeting so when it came down to priorities, the operational issues got priority over the strategic discussions. In organisation A they separated their meetings from the very beginning as per the recommendation from the external consultants. Their strategy meetings were never overtaken by operational discussions or issues because they were always going to be addressed in other forums.

4.3.4. Healthcare Sector characteristics affecting Implementation & Socialisation & Political Impact on the BSC Implementation

4.3.4.1. Ageing Population issues and Workforce Shortages

Several interviewees referred to the fact that Australian healthcare has several problems: an ageing population, and a workforce shortage. Interviewee 1 identified that the community expectations of health have grown over the years, and that there have been new technologies[6] introduced. Unfortunately, the funding to make those transform into mainstream medicine and hospital care had not necessarily been able to follow because they are expensive interventions.

[6] Interviewee 1 utilise the following example to illustrate the point. "For example, rather than doing a heart bypass, that would have costed around $10,000 to do, where the person would be incapacitated for weeks and have a large recuperation cycle and huge scar and possibly have to deal with infection. Now they do a 'stent' which means you don't have to have surgery. There are good things around that for the patient, particularly around recuperation, infection and lifestyle. But it costs nearly eight or nine times what an open-heart surgery would cost."

There was a common consensus among the interviewees that in the future healthcare is going to increasing face ethical dilemmas around, keeping people alive and providing interventions especially to older populations. Healthcare organisations will need to think about where to position their resources because most of the population will be older.

Interviewee 2 identified another sociological issue around the concept of 'equity'.

> *"The concept of equity in service to everyone has always been an issue in health but it's growing in terms of its acuteness and that's where this framework provides an opportunity to be quite transparent about what our future direction is and what we're intending to move towards".*

It was noted by Interviewee 4 that as a result of discussions at the time of the BSC there was greater health outcomes in promotion, prevention, and early detection of chronic disease, which is one of the major current health issues. The BSC helped them with strategies for medium to long term focus and not just short-term focus. It was identified that all of these positive outcomes meant people are living longer, adding to the ageing population problem, and how does healthcare deal with the question of 'quality' of life, not just 'quantity'.

At organisation A their population was already rapidly expanding and they knew that because they had seen the farmlands open up and sizable new estates developed, a number of these estates were retirement villages. So the BSC provided a good framework to articulate not only the growing and ageing population issues that they were facing but, to also outline the solutions in a very organised way.

This ageing of the population is also contributing to a workforce shortage, as is the drop-in population rates. This acute workforce shortages will also have a massive impact on healthcare's ability to meet the community's needs in the future. Interviewee 4 thought the BSC framework would allow them to evaluate the outcome of some of the long-term changes they put into place and to drive some new initiatives and changes. When participants asked why they needed the BSC framework. She spoke to them concerning the demographic changes in society as a whole and in their district in particular, and the participant's response was:

> *"Yeah, look. Most of this room is ... over 45 and in the next couple of decades we are going to want to retire. How many would be left then?"*

They then recognised the issues and the challenges they were facing and why they needed the BSC to control and manage the required changes within organisation B because their workforce was going to change dramatically in the near future.

Interviewee 8 noted that the ageing population meant, less people coming into the workforce, and an increasing cost for healthcare. The interviewee thought these issues were the primary drivers why business as usual would not work in healthcare. Interviewee 8 noted that …

> *"Being a global industry, it is very difficult to retain workers when international countries have made sustained efforts to recruit and pay them nearly twice what Australia pays. So, because Australia cannot compete financially, they market on lifestyle and work life balance factors."*

Interviewee 11 also outlined that with these changing demographics, eventually Australia's tax dollars are not going to be able to fund such a high level of GDP being spent on health. There are not enough tax dollars to keep supporting a user no-pay system.

These organisational level and healthcare sector sociological issues would suggest that the BSC therefore would be an extremely useful measurement and management tool in healthcare.

4.3.4.2. Politicisation

Interviewee 1 noted the high degree of politicisation of healthcare and how to a degree it prevents them from being proactive and keeps them in the domain of reactive. She did not blame the District Managers for being so operationally focussed because it is the operational issues that spark the reaction in the community and in the political sphere and therefore, they're always trying to put out fires. Although she did feel that the BSC had allowed them to match some of the community expectations and political promises to the planning framework.

As can be seen by the issue in organisation Z, in public healthcare if there are any problems being published in the media, political pressure demands that that issue take precedence over other projects. So, the political environment was an issue impacting the BSC adoption process. There was also a feeling at the time that organisation B wasn't heading in the new direction, but in fact there was no direction.

An example of this political aspect was experienced in organisation A, where pre-election promises were given that impacted at a local level that were not necessarily in sync with the local district healthcare planning process. This caused local BSC implementation issues. Another example occurred in another district when this organisation ended up with negative press, because they shut down a birthing wing because they did not have enough doctors there and in doing their planning, they could not foresee that situation changing quickly. Their planning had been leaked to the media. So, decisions flowing from the BSC were having a definite political impact on the organisations.

Interviewee 10's organisation put a lot of attention and effort into the area of safety and security. They also focused on staff development practices, because traditionally staff development attention had been too top-heavy. Additionally, they wanted their staff to feel secure in their jobs. So, they tried to deal with staff employment insecurities by using less temporary appointments, and employing more casual staff, and filling positions. They even got the unions to come to their BSC workshops and work with them for solutions. They established an employee assistance service which had never been there before. So, when they started their staff review process which was done by an external body and reported, they received insightful and open feedback. As their staff felt they could say anything that they had been thinking.

4.3.5. Findings for Research Question 2

The following characteristics or cultural aspects have had an impact on the BSC adoption and/or implementation: Firstly, most of the organisations studied had the BSC mandated upon the organisation. Secondly, internal divisions, and relationships had organisational and behavioural impacts. Thirdly, the competing priorities and strategic vs operational plans had healthcare sector organisational impacts. Fourthly, the ageing population and workforce shortage had socialisation impacts and the organisations all experienced the political impact.

Of these characteristics/cultures aspects politicisation seemed to have a positive impact on the BSC adoption choice for legitimisation and superior system reason, but negative on the implementation process in most of the organisations because of their fear of negative press. The implementation process was impacted by the fact that operational plans were often prioritised over strategic plans therefore negatively impacting BSC effectiveness.

These findings reinforce that ideas raised by Abernethy and Chua (1996) in their study regarding the introduction of clinical budgeting systems within a public hospital in Australia. They found that actors did not merely conform to governmental pressure but deliberately chose a particular course of action in order to gain additional resources for the hospital in question.

Numerous studies have shown how the emergence of health-care accounting is associated with the rise of a neo-liberal philosophy for the public sector to operate more like a competitive private sector (Preston, 1992; Chua & Degeling, 1993: Chua, 1995; Llewellyn, 1997; Preston et al., 1997). The media is also pointing out the ongoing government concern with rising health costs and the government's attempts to redefine their role and responsibility in terms of both the production and financing of healthcare. This has been observed in this Australian research as well, as noted in the discussion of Research Question 2 above.

The ageing of the 'baby boomers' population has increased demand on healthcare services. Hence the workforce shortage, (due to international demand of Australian trained nurses) from an already decreased current employee population has increased the demand for and usefulness of the BSC in Australian Healthcare organisations.

The fact that the BSC project was mandated had a negative impact on the extent of BSC adoption. Those organisations that only viewed it as a 'compliance exercise' were quick to drop it as soon as the funds were no longer allocated from head office and it was no longer promoted from the head organisation. They appeared to not fully understand the advantages that the BSC could bring them.

These findings reinforce Abernethy et al., 2007 suggestion that accounting systems may be no more than a part of the institutionalised and 'rational' myth structure of modern societies and they may be decoupled from operational processes and perform merely a ceremonial function. It also reinforced Rogers (1983) suggestion that the following characteristics influence the innovation diffusion process: (1) adopter characteristics (i.e. Healthcare); (2) the social networks to which the adopters belong (i.e. department/silos/relationships); (4) environmental characteristics (i.e. politics/socialisation).

Having discussed the characteristics/culture of the organisation and the healthcare sector on adoption and implementation, the next section will discuss the critical success factors

during the implementation process, that have led to the creation of the Critical Success Factor (CSF) implementation Model.

4.4. *Critical Success Factors during the Implementation Process (RQ3a&b)*

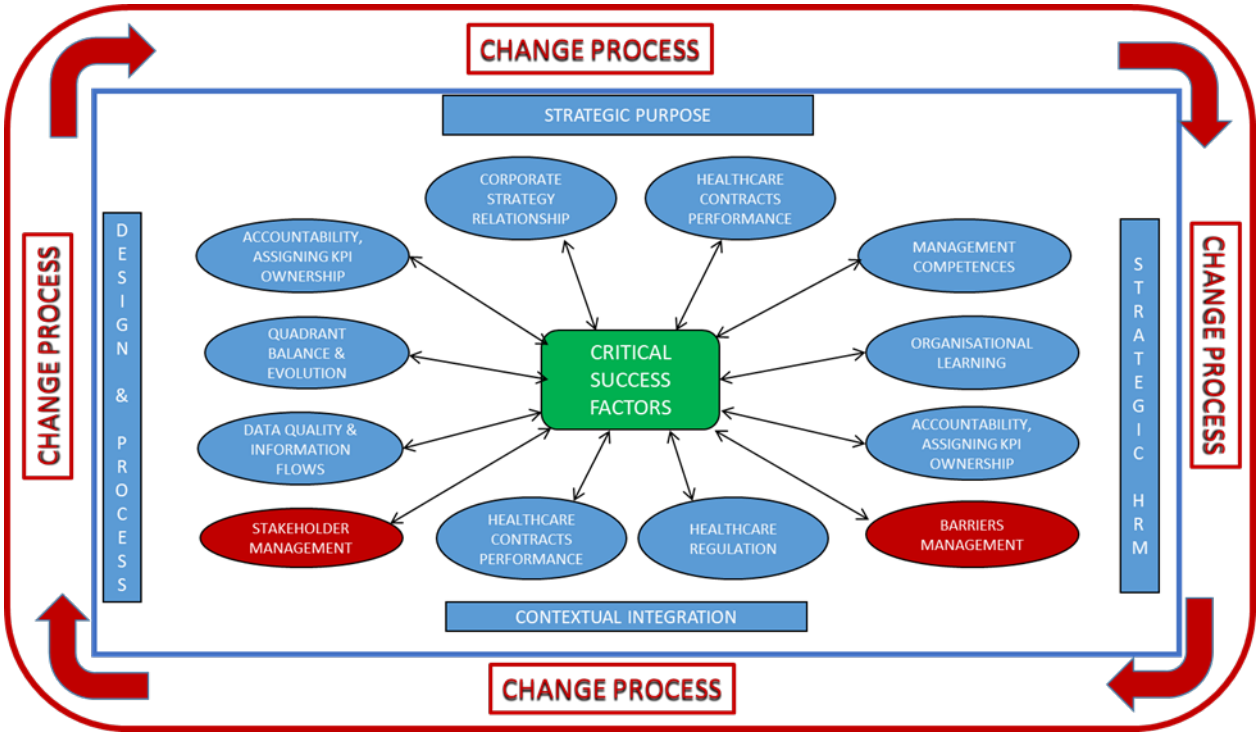
***"Part of the outcome was in the process, as it always is. How we did it was as important as what we actually came up with in the end"*, Interviewee 10 stated.**

This study also examined the different processes used within the healthcare organisations to try an embed the BSCs into their everyday business, along with the barriers they encountered.

RQ3a: What critical success factors affect the adoption of the BSC or the implementation process within a healthcare organisation?
RQ3b: What barriers affected the adoption of the BSC or the implementation process within a healthcare organisation?

This section will outline the evidence in support of the use of Rodgers' (2011) Critical Success Factor model and the modifications suggested by the researcher, to explain the findings within the interviews.

Diagram 4.1 Modified Critical Success Factor Model (Rodgers, 2011)



4.4.1. Strategic Purpose (Category 1)

4.4.1.1. Corporate Strategy Relationship

Within this first category of the model there are two main critical elements. The first is the corporate strategy relationship, i.e. to be successful the BSC must clearly relate to the organisational strategy. The findings in this study were that some of the healthcare organisations saw this link as just a fringe link to what they were doing, a 'compliance exercise', (often because they had no real strategy, or they ignored it), and others made sure their strategy was fundamentally reflected in their BSC. Where it was viewed as a compliance exercise the BSC did not become embedded, at best it became a measurement system. Where strategy was fundamentally reflected in the BSC, the BSC was successfully implemented.

4.4.1.2. Measurement versus Management

The second critical success factor in this category was the principle of measurement versus management. Top management needed to be clear about the purpose or role of the BSC. Were they just going to use it as a performance measurement system, to generate a list of measures and indicators around clinical services or corporate services to observe how they are performing or were they using the BSC as a strategic management system? A strategic management system in this research is where the organisation uses the BSC as both a measurement and management system. Both roles could be successful within an organisation, but this research observed a larger number of outcomes and outcomes that were long-term and more all-encompassing within the organisations studied, for those that used it as a strategic management system.

Using it as a strategic management system meant that the measures would be designed to cover strategic objectives, and initiatives, and the organisation would be monitoring and managing the extent to which their strategy was achieved. As can be seen in the following sections the approach by the top management to meetings, reporting and cascading the BSC reflected to the organisations where their emphasis was, that is, was the BSC being utilised as a measurement system, a management system or both. It appears that not all executive teams in the organisations studied were aware of which emphasis they were actually reflecting to the other employees of the organisation or the external stakeholders.

Interviewee 1 discussed that they had someone who took the minutes of the meeting and recorded the agreed actions and then basically those minutes were sent out and they became the new action plan. This action plan was a living document that they worked from so that people knew which actions they had to complete for the next meeting and follow up on. It also reported the discussions that had led to that decision, so that should there be any change within the executive team the new member would actually understand why those actions were being undertaken and why they may have differed from the original report. It fulfilled a role of being the initial stimulator for discussion and ideas pertaining to the proposed actions, but it was not the final document. Organisation A definitively reflected and actively aligned their BSC and their strategy. Their BSCs role in organisation A was as a strategic management system, as will be shown in Chapter 5 this led to numerous positive behavioural, organisational, and sociological and political outcomes.

Whereas in other districts, it was observed that the reports produced were read out and the actions were what the actions were, there was very little change to or thought that went into the discussion or report. Some districts did not even have an agenda or take minutes of the meeting, despite the fact that they were given education and training to say that that was an appropriate process to employ.

Interviewee 6 (organisation F) acknowledged that the BSC made them really look at the hospital's visions and aims, and using the theory of the BSC, decide the direction of the units and of the hospital for the next three to five years. By deciding what to focus on, then formulating and tracking the measures and objectives, this allowed them to target the needs of the organisation and prioritise measure and objectives. They reviewed their data monthly and analysed trends and made changes as necessary. The priorities allowed the organisation to address the issues raised and develop a new process or a new education program to achieve the identified priorities. Although it was noticed that organisation F had not really been proactive about this process because they still had the same set of indicators that they had been measuring from the beginning and had not chosen any new ones. This would suggest that this organisation did not have a clear vision of what the role of the BSC was, was it just a measurement tool or a management tool. Hence, they were potentially not maximising the outcomes from the BSC.

Organisation E also had monthly meetings for the BSC; the measures though were reported on at different timeframes depending on their priority. It depended on how well they thought a

measure could be achieved within a certain timeframe. If it was a more complicated measure, they would give them more time to report, this process worked well for organisation E. Prior to the meeting the champion would contact the executive and they would give him the information, he would put it into the BSC and then they would set up a slide presentation for the executive to go through each of the measures that had been reported. Again, the organisation's emphasis was on the measurement role, but they were having strategic and operational meetings.

There was a variety of methods that were chosen across organisation B in terms of reporting. Some people chose to report in cause and effect, other people chose to report just in terms of one measure from each perspective. Organisation A decided on their major strategic initiatives, then they developed several smaller initiatives to help them achieve that major strategy. Each initiative had its own measure(s) and they were working on all of them all the time, so this was quite a critical success factor for organisation A. Interviewee 2 saw the potential for it to be a performance management framework for strategy and operational business in organisation B, because once it was done correctly, they could monitor change in all parts of their business.

At organisation D every month they reported on the measures and the people who co-ordinated the measures and initiatives had to discuss the report when their measure was on the agenda for that meeting. Organisation D reported on three or four of those measures each month. Budget was always one measure reported on and then three or four others were reported on, on a rotational basis. They were given ten minutes, so they had to be well prepared, to talk openly about them and encourage a discussion on it. They could not present a control graph and get people on board the discussion in ten minutes if they had not done their preparation. This organisation's BSC reflected a role of both measurement and strategic management.

At organisation G Interviewee 7 thought they should have prioritised their measures differently, and that organisation G should have phased them in, rather than focus on all the measures all at the same time. In some incidences, the sponsor could not actually report on some of their objectives, because they were not actually doing them. Interviewee 7 stated
"That was a bit confusing to people because they felt they needed to report on everything".
This mismatch of objectives, priorities and measures created BSC implementation issues for organisation G.

Interviewee 10 (organisation J) noted that as manager she had to be very careful

> *"as she didn't want to put people in a place where they felt bad, but where they felt supported by each other. If the director of nursing was having trouble with staff turnover, then the conversation had to be one that did not make them feel like a really bad director of nursing".*

She found it went well if she asked,

> "*What's going on or what can I as the DM do to help more?* "

People needed to see that they could be involved in making changes both for staff and for customers/patients. They engaged in both operational and strategic planning in their meetings.

Another indicator of whether the organisation was using the BSC as a measurement or management system was how far the BSC had been cascaded down the management levels of the organisation. In terms of cascading in organisation A the middle management had two months to develop their scorecards before cascading it to people at the next level down. They were also encouraged to share their performance appraisal and development plan with the next levels down so that modelling was transparent and obvious. They had six divisional scorecards and had started unit level scorecards. They received a commendation from head office for their strategic planning framework, their application in terms of engagement with the community, their performance appraisal and development processes and their staff retention initiatives. This commendation was high recognition that they were employing business practice excellence. Organisation J had also cascaded well down the levels within their organisation but unlike organisation A their cleaning person could not have told you what the cleaners role was in terms of the BSC. They had a series of techniques that they were going to try and employ to help the employees see their role in the BSC and its relevance to them as employees.

Interviewee 2 discussed that in some of organisation B divisions the BSC went well but in others it became too overwhelming because of the sheer number of objectives that they selected from the scorecard to start working towards. In the divisions that tailored their BSCs, the measures were successfully managed. Hence, the number of measures on the cascaded divisional BSC needed to be considered in terms of its success, if there were too many measures or objectives it was too difficult to administer. The cascading halted in most districts because of the healthcare reviews and because they were unsure about the future status of the BSC due

to the uncertain ongoing status of the strategic planning unit. This was unfortunate because organisation B had just developed a very basic training module on how to cascade, explaining a couple of different models to achieve cascading. There was a need for different models, because the way the rural remotes implemented the BSC was different to the metro regions who tended to choose a more formal implementation process and elaborate set of measures.

There was mixed success in terms of achieving cascading between each of the organisations interviewed. Interviewee 2 stated the decision was made to directly cascade from divisional scorecards to performance appraisal and development plans that were modified to include each of the district's goals. In the cascaded scorecards, they were allowed to specify what specific activities their division would be undertaking to help meet those goals, but they were not permitted to make up their own goals or change the wording of the objectives.

Organisation H wanted to drive the BSC down to the individual unit level. It was discussed at their executive meetings and they agreed on measures, and they collected measures. Although the BSC information was not published for the lower level and hence no change was observed. They had cascaded it into the support areas but were having trouble cascading into the operational area. Organisation F cascaded down to the unit level. The units had developed their own strategy maps and had started their own meetings and their measures all fed into the divisional BSC. Although when they were told they did not need to do it anymore and the pressure to comply ceased, the BSC lost its strategic focus, and they just measured instead.

Organisation I which comprised a combination of public hospitals, and private hospitals, with shared services between the hospitals found that cascading the BSC was a very difficult task. Due to the fact that each of their hospitals had different drivers for their business and different components they wanted to include in the BSC. The interviewee was unsure how far they could cascade because they were still implementing. They had some core mandated components/measures, but they tried not to mandate too many because each division needed quite different measures. Even though this organisation was unique because it has a private side and a public side, they did not feel they needed different scorecards for each side. Organisation I developed different BSC at the different service levels. The difficulty for them was in the complexity of the structure of the organisation. They were trying to restructure around centres that they wanted to focus on and prioritise, but because this required cross

campus consolidation where it was sensible to do so, there were ownership issues to overcome before the BSC could be implemented. Interviewee 9 stated that …

"The pure theory would say that they needed strategy maps all the way down".

Although Interviewee 9 thought it would not work in their organisation. So even though they struggled with complexity issues, the BSC project did facilitate a change of structure within the organisation to structure as service centres rather than by location of the hospitals, with a view to maximise synergies and more efficient use of funding around common initiatives".

Organisation K also cascaded the BSC down, but noted it became harder the further down the organisation the BSC went, for example, quality and safety in the kitchen is very different to the laundry, therefore needed different measures. In organisation E they did not cascade down to the unit level, even though unit levels were engaged in undertaking activities to assist in achieving the BSC objectives and provided information back up to the executive level BSC. Organisation K tried to cascade it to the lower levels of management especially in the area of quality measures, but they wanted to apply the simplest methods possible to ensure quality and thought the BSC was too complex for their purposes.

Having discussed Category 1 Strategic Purpose as it relates to two factors: corporate strategy relationship and BSC measurement versus BSC management, the next section will discuss Category 2 factors: accountability and ownership; quadrant evolution and balance; data quality and flows; and stakeholder management.

4.4.2. Design and Process (Category 2)

4.4.2.1. Accountability, Assigning KPI Ownership

The first critical factor in this category is assigning and agreeing upon who would take ownership of the BSC measures, so that different organisational leaders are held accountable for delivering on their portfolio of measures. This factor interlinks with some elements of the Human Resource Management strategy category, in particular the development of 'cultural acceptance' and the avoidance of a 'blame culture'. The avoidance of a blame culture is particularly important where divisions are underperforming. As noted earlier by Interviewee 10 a manager needs to be careful, as they do not want to put people in a place where they feel bad, but where they feel supported by each other. They should be asking questions like, '*what can I as the District Manager do to help more?'.*

At organisation D every month they reported on the measures and the people who co-ordinated the measures and initiatives had to report when due, they reported on three or four measures each month. Having top management assigned ownership of one or more measures had a positive impact on the embeddedness of the BSC within the organisations interviewed.

There were mixed thoughts amongst the interviewees about whether the BSC was embedded within their organisation or not. Interviewee 3 observed that,

> *"the BSC wasn't embedded in most of the districts because when the project teams left it fell to pieces, so it was not embedded. She thought it was before she left her organisation, but it wasn't".*

Whereas Interviewee 9 thought the BSC was embedded, because the strategy map and scorecard had been developed when she arrived, and they were continuing to report against their BSC. The research revealed that there was a connection between those organisations that emphasised ownership of measures and reporting on particular measures and the successful implementation of the BSC.

4.4.2.2. Quadrant Balance & Evolution

The second critical factor under this category was the use of a balanced set of measures across the four quadrants. In healthcare organisation historically the focus has been on financial measures, but more recently with numerous healthcare reviews there was the temptation for many of these quality measures to be included in the BSC, and potentially taking the focus away from more strategic measures. The three major issues raised in the area of balanced measures were: the number and type of measures included in the BSC; the lack of a reward system to back up the employee measures in that particular quadrant and the different types of Human Resources systems in each organisation, including performance measurement plans.

According to Interviewee 7 the aims of the BSC were simple, clear and structured so as to make it easy, but observed that often people wanted to make things harder and more complicated than they needed to be. So, the wording and the intent of the outcomes, objectives and measurement and having it all linked and cascaded through the organisation, Interviewee 7 thought created some issues for organisation G. Interviewee 7 thought that organisation G tried to put too many measures in the BSC in their initial BSC which also created issues.

In organisation A in their first version of the BSC their measures were all quantitative and it was not until later they found out they did not have to be quantitative and that they could utilize initiatives. The training package was very prescriptive that they had to have a quantitative measure for every objective then the external consultants stated:

> *"You don't have to have a measure for every objective, and you do not have to use a quantitative measure for everything"*.

So, when Interviewee 2 assisted people in other organisations to start reviewing their maps he/she passed that information onto them. These organisations were quite relieved to understand that not everything had to be measured quantitatively, because the burden of administration built up over time by having to report against the measures and then report against their initiatives as well.

Interviewee 8 (organisation H) thought that balance in the BSC was important and stated that

> *"their organisation didn't want to fall back to the loudest voice or the guy with the biggest stick wins. If people had evidence and could actually say if we do plan A, we impact on this, and this, he thought that would lead them to a much more sustainable future; than just continuing to measure financial and operational statistics".*

Although Interviewee 8 thought to date, they did not have very sophisticated lead measures, or predictor measures in their BSC. Nor did they have a clear understanding of the impacts between the different perspectives of the BSC. For example, stated Interviewee 8

> *"If we change the processes, it might get cheaper, but it might also p… the staff off, they might resign, and we lose our best and brightest."*

Interviewee 8 felt they were not measuring objectives concerning human capital. Their Human Resource system says we lose one guy we gain one guy -- we have the status quo.

> *"The problem is that they lost an A grade 20+ year veteran and hired a kid straight out of college, who knows nothing, and is yet to prove himself, from a human capital perspective the organisation has gone down, but reporting says its one in one out".*

So, Interviewee 8 thought they did not have the level of sophistication to do predictive analysis, which is where they would get the greatest benefit out of the BSC. So culturally they were prepared, but it needed to be resourced and have sustained effort for this change to happen.

Interviewee 9 (organisation I) also commented on BSC balance and process.

> *"... they had problems with the BSC, because they found it difficult to implement the framework, not with being balanced, but with the processes".*

They tried mandating in the first round with some of the measures and it was essentially a mission and margin focus. Financial sustainability was mandatory, and then they tried to match that with their mission to say it is not at any cost, they still needed to be mindful of their mission. That is, the organisation needed to be responsive to the community requirements. They kept some core components but could not mandate too many of the measures because they were corporate measures, whole of organisation measures for their public side, but once they went down below the organisation wide measures, each area had quite different measures.

In terms of the quadrant balance critical success factor one of the issues that was raised was the issue that in the area of learning and growth, they had measures re employee's satisfaction and retention. Although in healthcare especially in public healthcare organisations they were unable to connect this set of quadrant measures to any reward system to gain benefits as noted in the discussion below.

> *"The degree of flexibility in terms of rewarding people for performing in health is not there,"* stated Interviewee 1. "*even though they were tying their strategy to it, even if the staff were giving 110% and going hard to help them get to their strategy, they were doing it for different reasons. They're not doing it for money, they're usually the people who have a value system that lines up with what they're doing and they're quite socialist in their outlook, they are doing this for their patients or they're doing it for their co-workers, they're already good at teamwork and they consider others. They are naturally there to give their best*".

Government healthcare organisations rely on employee's degree of socialism, which is what attracted the employees to come and work in healthcare in the first place. Therefore, these employees tended to stay for the long term because they felt like they are giving back to the wider community. Interviewee 9 noted that the employees felt …

> *"that they were contributing in some way to the 'greater good' so to speak".*

The researcher noted when analysing the BSC documents provided that the measures in the workforce quadrant were very different between the private sector and the government healthcare organisations.

Interviewee 1 also discussed that another issue in healthcare in the longer term was that they traditionally had weak performance management systems in the Human Resource context for employees who generally were not performing at a level the organisation expected in a Human Resource sense. Interviewee 1 stated …

> *"that has held the organisation back in so many ways. This came out quite clearly in a government review report released at the time. Managers were tired of the fact that if somebody was under performing that there was no way to manage that effectively to get them to either perform more effectively or to get them to leave the organisation and bring somebody in who was more effective".*

One aspect in healthcare that was part of the initial reluctance, was concerning performance appraisal and development plans and the tying of these plans back to the strategy plan. There was not a culture in organisation B of having a performance appraisal and development plan as normal, they were only used to performance manage poor performers in a Human Resource context, so performance development plans were viewed negatively.

The above discussion relates to both the quadrant mix question of measures and to the issue of having an effective strategic Human Resource Management system in place to achieve a successful BSC implementation. As the model demonstrates often the factors raised will impact more than one of the critical success factors or categories.

4.4.2.3. Data Quality & Information Flows

The third critical success factor in this category was data quality and information flows. Rodgers (2011) stated in relation to this factor…

> "To achieve a robust data feed, the organisation needs to have appropriate information and reporting systems in place. … Timeliness, accuracy, and an appropriate level of supporting information resources are therefore of utmost importance to an effective BSC system and are critical to its ongoing integrity and success." (p. 176)

As mentioned earlier in this chapter Information Technology quality, compatibility, and usability /understandability were all mentioned by the interviewees as being either a factor for success or failure of the BSC project. Interviewee 2 discussed that initially there was a lot of interest in whether having a linked database might actually improve the sharing of information between districts and between districts and head office.

Interviewee 2 noted that

> *"... peoples' Excel skills actually held back a lot of districts from being able to report effectively because the majority of the staff at the time did not have proficient Excel spreadsheet skills needed. So, they were still trying to learn how to use Excel and report at the same time and that was blowing out the administration time and increasing peoples' frustration, and hence negatively impacted the efficiency of reporting".*

Interviewee 7 observed that other issues were the lack of access to the necessary information in an easy and timely manner, and the complexity of the measures chosen. Interviewee 1 observed

> *"that there wasn't a lot of readily available data at the district level apart from activity related data, which made it harder to retrieve the needed information".*

On the other hand some organisations praised the advantages of doing their reporting through Information Technology means and the easiness of reporting once the system was in place. This supports how critical this factor actually is to successful implementation. This is definitely an area that is deserving of further research. The above discussion relates to information technology quality, and the following discussion related to the importance of information flow.

The importance of reviewing of the data was a major issue of discussion by the interviewees. Organisation J had key meetings where they reviewed the data and Interviewee 10 noted that that was really important. They would have to give a whole day to it in the beginning because they were debating everything, and everyone wanted to focus on all the data. Over several months the meetings took less time, as they realised they did not need to review absolutely everything every time. So, they become more streamlined and better at using their time. Employees in organisation J discussed and questioned the reported data in between meetings. They would make statements like the following,

> *"we have this thing on the BSC, and I know that we are using different lists, but I don't think that's going to tell us very much, but this might".*

Personnel became much more interested in how they might be able to say to their committee '*we know that we are doing better because of this'*. Both Interviewee 1 and 10 thought it was important that both the measures and the processes be reviewed on a regular basis.

The most important part of the feedback process was taking action on the feedback. Interviewee 1 provided a copy of their BSC with red showing the alterations and the changes they had made from progressive versions of the scorecard in line with the feedback that had been received from the consultations and the stakeholders, and this shaped the BSC along the way. If they had 75% or greater agreement on their objectives or the measures or the initiatives they were not changed, if it was less than that then the objectives or measures were reviewed by the executive team and a decision was made about how to change it in line with the comments that they had received. They utilized their feedback in a very formal way to guide the decision making. They could clearly say whether they had a majority agreement or not and some of that factual information helped them move past some of the very verbal detractors who were in fact from the minority. They had a clear system of accountability and employees had a high enough degree of trust in the process that it was factually correct. Interviewee 1 was not ever challenged by anyone to say that they had '*cooked the books or fixed the numbers'*. The employees believed in the process because the voting results were communicated back to them, so that they knew all the way through why objectives or measures or processes had changed.

Another action that organisation A took was that within a week they feedback through a newsletter to their wider community, their staff and their partners what was discussed and the outcome of each of their strategy meetings. There was a high degree of transparency in reporting back to their employees. There was no fear by the executive that stakeholders would request information through the Freedom of Information 1982 (FOI) Act.

The executive team was quite open in saying,

> *"Why not give people the information up front? They helped us to develop this, they're helping us to implement it, and we want them to know what we're doing against each of these measures"*

So, they kept stakeholders informed of what was happening with the BSC and how the plan was being used and what the BSC initiatives had achieved. In organisation A the BSC was achieving great things, so it was not hard to keep the stakeholders informed. This kept stakeholders in the loop and encouraged the stakeholders to keep offering services to assist the organisation to make the initiatives happen.

Organisation J, a little rural and remote district sent out a report on their success against their scorecard with the rates notice, which kept stakeholders engaged and informed. That was an important mechanism that needed to be considered, i.e. communication styles and continuing that beyond the development phase. That was a criticism aimed at organisation B that they did not keep stakeholders informed once they received initial support from them.

4.4.2.4. Stakeholder Management

The findings from this research has shown that in fact there is another critical factor in this category, that is also linked to the strategic Human Resource Management category as well. The management of stakeholders both internal and external (community) was seen as a critical factor to success by the interviewees, even those organisations that had not done a very good job of managing these relationships saw the importance of this factor.

Successfully managing the internal stakeholders was important and more on managing these relationships will be discussed under cultural acceptance, especially the management of the divisional silos that existed between doctors, nurses and allied health. This study though emphasises the importance of the external stakeholders as well. External stakeholders involved everyone within the chain of care for a given patient, ambulance, local General Practitioners (GP), community organisations e.g. homecare providers, stop smoking program providers, and community healthcare transport providers. The organisations that successfully implemented the BSC recognised the importance of all these stakeholders as they were trying to prevent repeat hospital admissions for the same medical issue, and to provide the best possible service.

Engagement with external stakeholders was undertaken at the time when organisation A was developing their plan. Organisation A were part of a cluster of four other districts in their zone and not one of those districts was willing to engage with external stakeholders because they were very unsure about how their leadership team would be perceived outside with the external stakeholders. Whereas Interviewee 1's executive team was very confident in their ability to interact and very confident in engaging with external stakeholders, so they were communicating openly with them and as time went on, they became even more committed to constant engagement with their external stakeholders. They did not have a *'them and us'* outlook to the process of engagement and this was critical in terms of its successful BSC implementation.

Interviewee 4 identified that because they had engaged with their stakeholders, those stakeholders, when it came to implementation time, understood organisation D objectives very clearly and were willing to assist them in many different ways e.g. by donating resources and time and expertise to bring the plan from its documentation stage into implementation. So, they derived many benefits from the executive team engagement and from engaging stakeholders.

In organisation J they were attempting to not only see better outcomes across the four quadrants, but also in terms of relationships in the community. So, the hospital's relationship with the community was one of their business process measures. A really important element was building relationships, across the various facilities and the inclusion of community stakeholders. At organisation J they talked personally with the doctors and had a workshop with the district health Council and workshops with private community members, and general practitioners, to receive their feedback and establish synergies in the provision of healthcare.

At organisation A, engaging external stakeholders was a key factor in ensuring that the plan was followed at the district level, because the BSC was not just a plan that was developed by a certain group of executives. There was high recognition that the community had become engaged in developing that scorecard and to change it in any way would compromise their relationship with their stakeholders and their community. They had three changes of District Managers during the BSC development but because of the consultation in the initial development stages had heavily involved the stakeholders there was a commitment by subsequent leadership teams to stay with the plan and keep using the information that was gathered from those initial consultations to ensure that the plan was carried through to implementation.

Organisation A, D and J who recognised the critical nature of these external relationships were all able to successfully implement and embed the BSC within their particular organisations. All the other organisations had limited success and either dropped the BSC or just used it as a measurement tool.

Organisation G also found that the BSC enhanced their community engagement. In organisation H they engaged all stakeholders as part of the master planning exercise and engaging the

community in the discussion rather than just the internal staff was key to their success. The discussions that they had pertaining to the strategy map was discussions that they had never had before. They had six months of well-informed reporting and quite passionate debate about where they were going and that was negotiated down into a map that the leaders agreed upon. Interviewee 5 congratulated Interviewee 4 because he/she worked with the community, with the mayors, the councillors and the general practitioners in the rural areas but in organisation E they had a level where it became too difficult to engage well with external stakeholders because they were so large, with multiple campuses.

4.4.3. Contextual Integration (Category 3)

4.4.3.1. Healthcare Contracts Performance

In Ch 2 the researcher noted that this factor was not relevant in the Australian environment.

4.4.3.2. Healthcare Regulation

As noted earlier in the quality management framework factor, due to the nature of healthcare there is an emphasis on quality, and there were many reviews at the time that meant there has been a number of quality frameworks developed. These frameworks required the reporting of certain quality data to the regulatory body. The framework had a negative impact on the implementation of the BSC within a number of the organisations studied, because the measures were a required part of accountability in healthcare and they felt that they were already doing this very well, they did not see the need to frame this within the BSC.

The secondary issue surrounding this category was that Government regulations already required numerous quality measures to be reported, as a consequence some of the unsuccessful organisations attempted to include all these measures into their BSC and hence lose the advantages and related outcomes that the BSC was designed to contribute to their organisations. Other issues identified in this area were that the implementation process was interrupted by several reviews, and there were issues around linkage to funding, both for the implementation process and the funding of the initiatives themselves.

Post the government reviews there was no formal review of the organisation B strategy map however there has been several reports and plans developed. Interviewee 2 thought that now

their strategy was inexorably tied to some of those review documents that have been released, that they had to commit dollars in a direction that is now slightly reactive towards these reviews, at least in the short to medium term. There was pressure from the government after the different healthcare enquiries to implement the recommendations from those enquiries because of the amount of money spent on conducting them. Unfortunately, not all recommendations were necessarily strategic in nature or very forward thinking and the framework that would bind them together was not clearly communicated.

As most of the organisations studied were part of the public sector, one of the critical factors in terms of the organisation's point of view was funding. The staff at organisation H knew the BSC was important when they started getting funding and personnel from head office and their local district areas started coming to their meetings and telling them how to implement the BSC, and advising them about what was happening in other districts. So, when organisation H of support provided and they were given project officers.

Organisations F and G were able to get buy-in for the BSC from negative employees when they communicated that their strategic plan would drive funding. Interviewee 4 also thought an advantage of the BSC was that if they wanted some funding to do a particular project and it fitted part of the scorecard and their organisation could provide the evidence to show that it would provide a gain, they received funds for the project.

The organisation B culture prevailing prior to the organisation Z negative publicity incident and the reviews was very much a 'command and control' culture according to Interviewee 8. The organisation tried to encourage compliance by saying that they would not approve any more funding for initiatives unless the initiatives were first tied to their district strategy map and aligned with the head office strategy map. And an example of initiatives linkages was …

> *"they put a bid for $4 million to upgrade over 7 years the network connectivity of the hospitals and they had to tie it into the individual objectives of the district scorecard and show how it fanned outcomes in accordance with organisation B strategy map".*

Interviewee 9 also noted that if a project needed funding, at budget time they had to write up an initiative summary and show how it linked to the BSC. That process was not as tight as it

needed to be, in the main the executives went through and looked at the funding, and what budgets had come in and what money might be available for initiatives. The executive would then discuss the priority order in which the initiatives would be undertaken.

Interviewee 1 observed that unfortunately even though organisations did put up some business cases around their specific initiatives at the district level those were rolled up to a zonal (combination of several local districts) level initiative. Then the zonal management unit in turn rolled those business cases together and requested funding for the initiatives from head office. So even though initiatives were funded from the business cases that districts put forth they were funded on a head office wide basis, as such the funding did not always filter down to the district level initiative. An example was the chronic disease initiative. A lot of districts put forth requests to establish programmes and activities, and a plan was developed at the head office level, but there was a variable degree of communication back to the districts about the outcome of each of the business cases. In some districts people became very disenchanted and disengaged as a result of that lack of communication.

From the findings in the interviews in this category not only did the number of required government measures have a critical impact so did the amount of funding provided both for the project itself and for the strategic business cases proposed to the head office.

4.4.4. Strategic Human Resource Management (Category 4)

This category had three critical success factors: management competences, organisational learning, and cultural acceptance. Based on the research findings a fourth critical success factor was identified by the researcher, management of barriers. There are acknowledged barriers to the BSC in healthcare and these needed to be identified and plans put in place before and during implementation to deal with these barriers.

4.4.4.1. Management Competences

The first critical success factor in this category was management competency. As noted earlier in this chapter top management support is essential, but obviously the manager of the project and the executive team needs to have a certain level of skills and competencies to be able to successful implement and facilitate an effective operation of a BSC system.

Rodgers (2011) suggests these skills might include: listening skills, planning skills, or emotional intelligence. This researcher posed that prior experience with operating a similar system in a prior role would have a positive impact on the extent of BSC implementation. The findings in this study show that the three successful organisations (A, D & J) all had champions and/or District Managers who had prior experience with either the implementation of the BSC or other major projects of this type.

The level of internal consultation and training provided by managers was a major issue impacting on the success of the BSC implementation. To try and up skill their managers organisation B delivered some intensive information sessions that started at a higher level than those who were actually going to chair the implementation process. Unfortunately, there was a lot more extensive training done for those who piloted the BSC than for any of the other BSC project officers after them, The training did however instil an understanding of what the BSC was and techniques to assist the BSC project officers with implementation. The government made available quite high-level executive training observed Interviewee 10. He/she as Chief Executive Officer went to every consultation, ran the review meetings, and oversaw all the BSC documentation, made all the decisions about the project officer and about how workshops would be run. Interviewee 10 thought the workshops were important and needed to be run appropriately. They wanted the employees to see the linkages and that it all made sense and walk away having spent their day carefully and thoughtfully and not feel like they had wasted their time. They also lined up personal interviews with some of the people who just would not attend the workshops. They had a workshop with the district health Council and with private community members, and the local general practitioners. This type of management led to a successfully embedded BSC.

On the negative side Interviewee 3 stated that the training that they received was not as valuable as what it could have been. The training was supposed to happen before they did any consultation, but it happened after some consultation had already occurred. Interviewee 3 stated

> *"... They needed to do training first then some consultation and communication of what was happening".*

Interviewee 5 also noted that while education was provided face to face and via written and video formats there was still a lack of understanding of the system throughout their organisation.

Interviewee 3 at organisation C thought that the timelines for consultation with staff were too tight, they did not anticipate the level of consultation needed. The districts needed to consult with a number of organisations external to their organisation; and they had to deal with other government departments. They also had to make sure that the internal staff knew what the BSC project was trying to achieve and make them feel they could be part of the BSC process and a month was not long enough for the Champion to achieve this level of education. While the champion in this organisation tried to do this extensive management of stakeholders and consultation (as suggested by the adjusted model earlier), they received little support and hence they were unsuccessful in embedding the BSC and achieving the outcomes they desired.

Within organisation J they identified personnel who would champion it, employees who were open to new ideas, and these employees were not all at the management level, they came from throughout the organisation. The BSC information sessions were very inclusive and extensively workshopped. There were about a third of the personnel in the organisation who participated and contributed to the process. After the workshops when they thought they had identified appropriate measures/initiatives they would present them back to all the employees.

The above section shows the importance of having competent managers who can successfully manage all the stakeholders, both internal and external, for successful BSC implementation. This also links to the next critical factor known as organisational learning.

4.4.4.2. Organisational Learning

Organisational learning involves an understanding of the reasons for the failure of the prior system, and why the new system is a superior system to the old system, or ways of doing business. This learning and education process is more effective if permeated within the organisation before the BSC implementation process. The relative advantages and need for a new system must be understood and 'sold' to the managers and the organisational members and external community alike. The problem here is that if the organisation does not learn from past mistakes, failures, or poor systems, then they are more susceptible to falling into the same traps as previously experienced. The unsuccessful organisations (C, E, F, G & H) within this research all seemed to suffer from this lack of organisational learning. They were just trying to take a 'band-aid', 'compliance exercise' approach rather than cultural change approach.

An open culture of feedback and internal stakeholder involvement will help facilitate this type of organisational learning. These were the characteristics exhibited by the organisations A, D and J who successfully implemented the BSC within their organisations.

4.4.4.3. Cultural Acceptance

The critical success factor of cultural acceptance was mentioned in various ways by each of the interviewees and appears to play a pivotal role in the successful BSC implementation. The ability to sell the BSC in a way that generates buy-in to the BSC system by all stakeholders and across traditional divisional silos within healthcare is a major and time-consuming task.

Interviewee 1 as project officer at organisation A did not face a lot of the same issues that other people in other districts did when trying to sell the concept to their executives. Because the executive at organisation A had already bought into the concept when Interviewee 1 got there so they only had to sell it to the staff and their partners and external stakeholders. So, that the stakeholders knew what was going to happen, and were asked to help organisation A make it happen. This was identified as a critical success factor for them. There was some initial reluctance around performance appraisal and development plans and tying strategy to them, as there had not been a past culture in organisation B of having a performance appraisal and development plan unless you were being performance managed in a Human Resource context. So, performance and development plans were viewed as a negative thing within the head office and its district at the time of BSC adoption. They had to resell it in organisation A as a positive thing and by having everybody have one at the higher levels that sort of overcame some of that initial mistrust and suspicion.

In organisation G they did not have the buy-in that they needed.

> *"People were told what they had to do and that does not get people buying into the process or understanding the intent or the expected outcome and that can make things more complicated and less effective. Districts had done their own planning and in their own ways traditionally so introducing a new method was a challenge. They tried to get buy-in by saying this is just a complementary tool to what you are already doing, and we are not replacing that, but they still got angst and a couple of barriers*[7]*. They*

[7] Note this is contrary to the promoted way of implementing the BSC and this organisation dropped the BSC.

also involved the clinicians at the beginning on what were their priorities. It gave them a sense of ownership and priority because every issue that got identified was close to their heart and seen as important".

Interviewee 6 and 7 noticed that there was some scepticism from mainly the medical area doctors, so their organisations employed a different type of communication strategy for doctors. The doctors then came on board because they perceived themselves as being able to directly contribute to the BSC measures and process and drive for the measures they required. Because the strategy and BSC project clearly came from organisation B, the doctors thought

"we don't want to know about it, it's another head office thing', but when they realised that they would be developing their own strategy, and that organisation B's was an overarching one, and they had a chance now to get together and develop their own based off that, then it was, 'OK, so it's ours, it's not theirs".'

In organisation J they had a sprinkling of people who were cynical and some who were highly motivated and positive. Getting personnel out of their workplace to attend meetings about the BSC and the development of measures was difficult in both organisations J and F, discussed Interviewee 10. Interviewee 10 noticed that it was not as difficult in organisation J and thought this was because there was a

"collective desire in organisation J to do the very best that they could".

At organisation F she heard on several occasions comments that the money spent on doing the BSC would be better spent on two or three more operations. Initially there had been problems with engagement not only of the District Managers but the whole of organisation F.
Interviewee 10 felt that the BSC…

"should have been easier there because they utilised information in their presentations and toolkits that had been prepared in organisations that had already implemented the BSC", but they still got no buy-in.

The BSC was not successfully sold in organisation H either. According to Interviewee 8 they

"didn't make an effort to capture their measures as a by-product of their business, they treated it as a separate measure exercise which required extra resources and therefore they had minimal compliance, and once the pressure corporately came off the BSC,

people reverted back to business as usual. He learnt that it was only the things that people were passionate about that had real relevance to their business that got legs, all the rest fell by the wayside".

Organisation H did however learn to plan well, they had a good district master plan, which had very broad buy-in across the organisation, but they did not report on their BSC measures. Stakeholders were very excited about where the plan was going, and it had a high level of public acceptance. Unfortunately, even though they reached broad consensus on where they were heading, they did not successfully implement the BSC within their organisation.

In organisation K the BSC team did not have a broad consultative method of developing the scorecard it was just created by a team at the top level. Organisation K at the time of the research had not reached the point where they were using it as part of their reporting package to their executives. They got more buy-in from the clinical staff when the conversations were concerning operational issues, and non-financial issues like quality and safety rather than focussing just on finance.

Interviewee 1 observed that in the early stages *'how the concept was sold was not given enough credit'.* One of the very first presentations that she gave to stakeholders was an overview of the demographics of the district and some of the drivers for change. Interviewee 1 did not think the other districts really understood the BSC and they were unsure about what it could achieve and what it could do, whereas their District Manager was very clear that the BSC was going to be a successful venture and he got the executives on board. The executive knew that sitting on the sidelines detracting from the process was not going to be tolerated. They made a commitment and they would pursue it, whereas other organisations had detractors who detracted from the BSC process because it had been handed down from head office. These distractors thought of it just as another planning mechanism, and if they complied for now, it would eventually no longer be required.

The District Manager sold the research side of the BSC, that it was a very sound system, and that head office had resources/funding tied to it. So, if it was not on the map it was not going to get funded. Organisation A knew that initiatives they had been talking about for so long in terms of goals or needed changes, had to be included in the strategy map to attract funding. So, from the beginning the executive at organisation A saw this as the opportunity to *'raise things*

they'd struggled to get airtime for both at the zonal and head office level'. The executive saw this as an opportunity to showcase how they saw what the district needed to change and what they needed to do to make that happen.

Different groups had very different levels of buy-in and support for the BSC. The doctors seem to be the hardest to sell to. In organisation H their personnel perceived the BSC as a process that was being done to them and not a process to participate in. The senior managers bought in quite well, but the department heads of really important units said …

> *"I've got something better to do. The nurses came on board really well, the allied health people half and half, … they saw this as a way for them to get what they needed, … but they fell at the first hurdle. As soon as there wasn't any money coming …".*

Interviewee 6 also noted that the nurses buy-in was greater than the other silos, as they liked the visual presentation. Having the BSC in the form of a map made it quite easy for them to understand, but from a medical (doctors) point of view, they felt that it was just another bureaucratic process, something led by organisation B, and driven by the District Manager. The doctors were not confident in the District Manager, so did not want to do it. That particular kind of disharmony in the organisation prevented it from working well, because, if the medical directors were just saying *'Oh it's a waste of time, I'm not doing that'* or refusing to look at it, it was very hard then for the rest of the organisation, to really focus on it. So, organisation F ended up with a measurement rather than management type BSC.

Interviewee 2 discussed that they struggled to get support from those at the operational level, but the information technology personnel, the safety and quality personnel they all had strategy maps and the information technology personnel were extraordinarily good at reporting against their map. Interviewee 9 discussed that when it came to funding projects, finance was only interested in next year's money, but the BSC project system started to predict what the obligations were likely to be, not only during the project but also in the future and so the finance-oriented personnel needed to learn to accept the BSC encompassed more than finances.

At organisation E their doctors had no interest and the nurses had limited interest in the BSC. The Allied Health had some interest in it because the Allied Health people accepted changes in philosophy, principles and activity, especially the social workers easier than other personnel.

Doctors felt they were too busy to manage or participate in the BSC process. Medical officers also had their colleges which all set quality standards for them to achieve and report on they did not want to have to use a different tool and double up on reporting. Senior nurses were also flat out and did not feel they had enough time to engage with the BSC project. Interviewee 6 felt that the nurses needed a gradually phased in process and not to be implemented in the short three-month timeframe they had.

The difficulty at organisation F was doctors are interested in the scientific side of the components and the element of proof, unequivocal, and undeniable. Interviewee 6 stated

> "*'if it is not true it is of no use'. Anecdotes couldn't be used because the medicos thought they were scientifically useless".*

Organisation F ended up with a very broad kind of document that their personnel were not committed to. This contrasted with organisation J where they only had a small group of medical officers who did not participate or participated with a high level of cynicism. Within organisation J most personnel at that time were motivated to participate because they wanted to observe better outcomes.

At organisation A they had a few key influential doctors that were on board right from day one so they were actually able to organise getting all the doctors together for a discussion pertaining to the BSC and how the BSC was going to work. This process of achieving buy-in worked well for organisation A, having the key doctors buying in.

Organisation H, however, was singularly unsuccessful in engaging enough of the doctors. This organisation managed to achieve buy-in by a dozen fantastic doctors, visionaries who ended up taking senior positions within the organisation, which assisted the BSC implementation process. Interviewee 8 noted the following:

> *"But the vast majority of the doctors just wanted to do medicine and had the attitude 'give me what I need, and I won't squeal, or resign'".*

The doctors were not focused on five years' time, they were focused on tomorrow.

Interviewee 10 noted,

> *"it's about working with them (doctors) and understanding what their drivers are and finding a common view, but there is a lot of self-interest and self-preservation that comes from clinicians and you have to work through that before you can get too far.*

But you end up in these day-to-day operational arguments because it is very hard to get them to think strategically".

Interviewee 4 also noted that the trick is to get buy-in from all the players so that the outcome and the design of the BSC is balanced and that people own it. She discussed the idea that even if the BSC was well resourced with a lot of support unless the medical staff saw value in it, they would not buy-in and it would be hard to sell to them because they were not sure how it would enhance their work practice. Interviewee 4 said,

"It's hard to get buy-in from the doctors if they can't see the relevance to what you are doing their time is precious, so you won't always get buy-in from all of them. You have to try to get buy-in from one or two of the natural leaders and hope it will dribble down but if you looked at our health BSC you'll see that very few of our medical staff are undertaking the lead role or responsible role for the objectives."

The directors of nursing, the heads of the corporate governance and the finance personnel were amongst the personnel who undertook the lead role for each objective. This strategic approach to how to do business is not always seen as relevant to the clinician on the floor, not part of their day to day business. Interviewee 4 felt this is a real issue in healthcare organisations.

The next section will outline the additional critical success factor as identified by the modified model of successful implementation. For successful implementation and embeddedness (i.e. 'everybody's, everyday business') the management of known barriers to adoption was required.

4.4.4.4. Barrier Management

Each of the issues identified below will need to be managed wisely by the organisation to enhance their chances of having a successful implementation of the BSC. The issues raised in this area by the interviewees were: top down approach; use of jargon; number and type of measures chosen; degree of openness to sharing and new ideas; limited timelines; time consuming process; limited resources and funding; and process breakdown.

Organisation H had an issue with their top-down approach, Interviewee 8 understood that with a strategic technique like the BSC their organisation needed to start somewhere so naturally they started with the head organisation. Although this interviewee thought that there was no room to negotiate modifications as the BSC was rolled out to the other organisations.

Interviewee 8 thought the key thing was using Kirk Lewin's force field model where projects reach equilibrium because there is a balance between the factors that are promoting them and the factors that are retarding them. One of the analogies that Interviewee 8 used in their initial discussions was „„

> *"the idea of driving down the M1 with the handbrake on. There are two ways they could get the car to go faster, they could step on the gas, but sooner or later they would take their foot off the pedal and go back to where they were, or to take the handbrake off".*

Organisation H tried to really focus on removing retardants, and that ended up in their district culture, where people and processes were seen as being deliberately constructive and able to be challenged. Interviewee 8 noted that

> *"the way the BSC project was originally presented in their organisation was very much a promotion focus. They stepped on the gas and threw lots of money at it and then when the attention went somewhere else, they took the foot off the gas and it all went back where it was. Some think on balance the district is better for having gone through the exercise, but it would have been better to see it through to the end, to get a scorecard in place so that they could start balancing the competing interests, because of those competing interests, pressures were going to get heavier".*

Interviewee 1 stated that the most important thing was not to use any jargon. To give their personnel an understanding of the drivers and to explain the scorecard, they simplified the language very early in the process. She told them 'internal process is about service delivery'. Then the corporate office presented a very large-scale presentation to organisation A personnel in an attempt to encourage participation, which utilized the BSC language in its purest form. There was jargon scattered throughout the presentation and the evaluation forms from that session stated that they needed to stop using the jargon within their district, because it alienated their personnel because they could not understand the presentation.

One of the measures utilized by the external consultant to evaluate the effectiveness of the BSC in organisation B was around the use of the language of the scorecards. The findings were that there was a high degree of usage amongst the personnel who had initially been engaged and who had been provided with some additional training in the scorecard but outside of that, down to the clinician level, there were problems with the use of the jargon and how it had alienated personnel from the project. So use of jargon was a very strong factor in whether people

engaged with the concept or not and this was probably not recognized until part way through the process on an organisational wide basis, in which case some of the damage had already been done in that personnel were already alienated.

As noted earlier in organisation A in their first round their measures were all quantitative and it was not until later, they found out they did not have to be quantitative and that they could utilize initiatives instead. The training package they received was very prescriptive that they had to have a quantitative measure for every objective. Then the external consultants advised that the organisations did not need to have a measure for every objective, and that not all measures needed to be a quantitative measure.

Interviewee 9 (organisation I) discussed that they had problems with the BSC, they tried mandating some measures in the first round and it was essentially a mission and margin focus. Financial sustainability was mandatory, and they tried to match that with their mission to say it is not at any cost, they still needed to be mindful of their mission. They kept some core components but did not mandate too many measures because they were corporate measures for their public side, but further down in the organisation, each area had quite different measures.

Interviewee 8 stated that their organisation H they did not want to fall back to the

> *"'loudest voice or the guy with the biggest stick wins'. If people had evidence and could actually say if we do plan A, we impact on this, and this", …* thought *that would lead them to a much more sustainable future; than just continuing to measure financial and operational statistics".*

Although it was acknowledged that to date, they did not have very sophisticated lead measures, predictor measures, and they did not clearly understand the impacts between the different perspectives of the BSC.

Interviewee 1 (organisation A) observed that in some organisations, the executive teams were very much involved in understanding the report and leading discussions around it versus the organisations who delegated out and when it was brought back to the meeting, the delegated just read out the report. So, the functioning of the executive teams was an important factor as was the degree of openness of the executive team. Interviewee 1 noted that in some cases

"there wasn't a culture of allowing people to openly put forth their ideas if they were out of keeping with perhaps some other peoples' viewpoints and they couldn't necessarily have open discussion and debate about the best course of action".

Interviewee 1 observed that as soon as the project staff left, a lot of them did not report again after that because they either had insufficient resources and in some cases they were probably holding out reporting so that they could be given extra human resources or they just had insufficient time and there was competing priorities in terms of accreditation. They only had six weeks in the planning process between when the project officer was appointed and when the end of the first consultations was completed and the first workshop was conducted. So, in six weeks Interviewee 1 interviewed over 400 people and put together a collation of their ideas. In other districts after six weeks the project officers were still trying to get the executive on board, to understand the BSC and to get agreement on whom should be consulted.

Interviewee 8 stated that organisationally they were worried about whether or not they could sustain the effort with such a highly compressed time frame. The whole of the BSC had to be finished; the first set of measures had to be reported at the district level within nine months from introducing a project officer and their budget was being tied to their measures.

Interviewee 10 discussed that any good planning technique was time-consuming, but the BSC was extra time-consuming because they had to learn it first and settle on the measures and then rigorously looked back at the measures and feedback. Interviewee 7 thought they had a lot of information at their fingertips, but it was a bit of a tedious process and a bit daunting to start with, and they were asked to create the BSC in far too short a timeframe. Organisation G was not ready for external stakeholder involvement, internally they identified a number of areas that needed improvement. The areas identified were risk areas so they became priorities but they did not employ new and innovative ways of dealing with the issues, because personnel viewed developing new initiatives as too large a workload. Interviewee 9 also thought time was a big factor that affected adoption, they thought it would evolve into something that was not time consuming, but it ended up being quite time consuming. At organisation I there was discussions concerning how trying to get the right measures and all the data was quite difficult and time consuming on personnel who had other priorities. They identified some areas where continuous improvement needed to occur. One of those areas was the discharge summaries

which required large changes in their organisation to be efficient and effective, but they were not able to achieve these changes even in a 12-month timeframe.

Interviewee 6 also noted it was time-consuming getting all the managers together to discuss the strategy map and to look at what is important to organisation F. The interviewee noted;

> *"that it was a huge task and they did not give it a chance to run long enough",* she did not think *"it was too resource intensive, but some of the executive did".*

Interviewee 8 worked in a very busy district that did not make the measurement process part of their business nor did they capture measures as a by-product of what they did on a daily basis. As they did not have a system that collected the data needed for their BSC that meant that they had to do a secondary measurement exercise which meant that people had to put in extra effort. They were double reporting firstly against measures and then against initiatives, hence people thought it was a waste of their time.

Interviewee 5 (organisation E) observed that they still had a lot of BSC folders around their establishment which would probably be emptied and thrown away.

> *"It was the con; we poorer organisations might have more money to focus on a tool which if it was implemented in its entirety would seem too complicated. They took out the bones of the BSC and it was quite useful for them".*

Interviewee 5 thought that in organisation B even though they made it as simple as they could it was too hard to implement these new tools in organisation B which had limited resources.

Interviewee 4 noted that rather than having people saying, '*give me give me, I want because I think',* it was better to have a systems and process approach not an individual people approach. If you look at the history of healthcare what happened to organisation B could have happened to any public health service in any western country in the world and that is why when the reports came out all the outcomes of the study were accessible on the web for five years so that others could learn from their mistakes. Interviewee 4 thought that.

> *"it was a huge systems and process breakdown, but that once you got your head around it, the BSC was an excellent thing to change the systems and process. Unfortunately, new people come in and they 'threw the baby out with the bath water' and they started again, and everyone thought here we go again".*

Resistance to change was another barrier experienced by these organisations; there was fear of a 'hidden agenda', employees felt the organisation was just trying to create more work for them; fear of the political issues making it to the press, and fear of the executive concerning openness and transparency. They also were sceptical of whether the BSC would last longer than the current administration team.

So, in spite of the barriers identified above within the organisations studied: i.e. top down approach; use of jargon; too many and too complex measures; lack of openness; time consuming; limited timelines and resources; and resistance to change, it was possible to overcome these barriers and have a successful BSC adoption and implementation process.

As the model demonstrates often the factors raised will impact more than one of the critical success factors or categories. Also, that all these factors working together will have an integral part in the success of the BSC implementation project. Hence, this led the researcher to add an additional element to the Model. For the best interplay/synergies between the factors identified above, the BSC implementation needs to be undertaken as a complete change agenda.

4.5. *Change Process vs Compliance Exercise*

The researcher believes that another missing element from the model for the success of this type of implementation is the overriding importance of it being very much driven as a change agenda. Initially the success of BSC implementation is very much affected by the way the project is sold, the most successful implementations were in the organisations that sold this BSC project as a complete change agenda not just a tact-on to the current performance management system. The need for a change agenda was even more important in healthcare organisations, particularly public ones, because they come from an environment where new projects, processes, accreditation etc were forced upon them regularly and then dropped once the next new 'Fad' or 'legitimising' technique or tool came along.

Interviewee 1 and 10 (organisation A & J) conducted the BSC implementation as a big organisational change type project that made their personnel think and operate differently. Everyone at every level was given the opportunity to be involved. They conducted numerous educational/informational sessions to explain to their stakeholders, firstly executives, then

employees, then external partners why they were implementing the BSC and that this was a major change in terms of thinking strategically and how performance measurement and management would be done into the future.

The possible positive advantages and outcomes of the BSC were presented to the stakeholders right from the beginning. The organisation was left in no doubt that the old system needed to be replaced and the BSC was being implemented, and their participation in the process was encouraged. The other organisations appeared to view the whole project as just another head office directive, so took a 'compliance' approach.
Interviewee 4 stated that:

> *"they sold it as too complex a tool initially but once you got your head around it and got it working in a way that suited the area that you were working in it was a good tool. ... (it) was made much more complex than it needed to be to start."*

As the BSC implementation progressed there was a switch to a need for the stakeholders to observe changes around those promoted advantages and positive outcomes for the organisation to achieve embeddedness of the BSC system into "everybody's day to day business".

Interviewee 6 (organisation F) saw the BSC as a chance to tie all their ideas together under a big workforce program. This interviewee thought it was something that made a change in the executive team's attitude and that attitude change continued even though they did not continue with the BSC or reporting regularly. Out of their BSC came a big planning and development unit that looked after service, marketing, capital and infrastructure planning. The executive modelled their service plan in strategic terms and based on the objectives from the BSC. The service plan included initiatives from a customer perspective, an internal process, a financial, and from a workforce viewpoint. Each unit developed their three to five-year plans around that structure and reviewed their objectives regularly.

According to Interviewee 1:

> *"something they did differently at organisation A that really moved things forward was they started off implementing their initiatives straight away. They were their big guns of change and people very quickly saw that the plan was being used and that there were some outcomes coming out of that plan and it kept them engaged with their partners".*

Immediately following the completion of the scorecard, Interviewee I selected an issue that employees had repeatedly brought up in the survey in the consultation phase about the fact that management had changed over the milk from trim to full cream milk and decided to ran this issue in their first electronic survey. This survey of milk preferences, became the precursor to running their staff satisfaction survey. People voted for the type of milk that they wanted the district to have. They got over 60% of the staff to reply, and it set the scene because the change of milk was implemented immediately. So, staff knew that if they were going to participate there would be an outcome. So, when they ran the staff satisfaction survey, they also got one of the highest results they had ever had. So, making sure they actioned initiatives and ideas was very important to the success as well.

Interviewee 4 who had driven change for a long time through numerous projects, stated

> *"that if you don't get an outcome if you start something and you don't finish it and it goes in the bottom drawer then the next time you want to do something you've got a huge amount of work to do to get people interested, because people have a level of cynicism. For example, if you do a staff satisfaction survey, and you don't use the results, to instigate some change, then the next time you do it people say get lost".*

So one of the major factors to be successful at implementing a BSC found in this research is that you make it a whole change agenda project, and that if you are promoting it as a change agenda, then changes need to be observed along the way to maintain people's involvement.

4.6. *Findings of Research Question 3a and Research Question 3b*

To frame the findings to Research Question 3a and Research Question 3b Rodgers 2011 Critical Success Factor Model was chosen and modified. The model contains four overall categories: strategic purpose, design and process, contextual integration and strategic human resource management. The factors identified within these categories of the model and discussed below are similar to those examined in the following research: Fiondella et al., 2016; Hepler et al., 2016; Grigoroudis et al., 2012; de Waal, 2003 and Kaplan & Norton, 1992, 1993, 1996 a-c, 2001 a & b.

In response to Research Question 3a the following discussion will outline the factors found to be essential for the successful implementation of the BSC. The Strategic Purpose category

contained two main factors: corporate strategy relationship and the principle of measurement versus management. For a BSC to be successful, it must clearly relate in some way to the organisation's strategy. This research is consistent with Rodgers (2011) findings that the nature of this relationship was important to the successful implementation of the BSC. Where organisations developed a strategy but did not incorporate the strategy into their BSC, because every day operational measures were used instead, the BSC was either abandoned or turned into a measurement tool only. Whereas on the other hand where strategy was fundamentally reflected in a broad way within the BSC, these organisations successfully embedded the BSC.

The second critical success factor within this area is the principle of measurement versus management. Again, consistent with Rodgers 2011 model there needs to be clarity at a senior management level concerning the generic role and purpose of a local BSC system. Those organisations that chose to emphasise the measurement and management roles were more successful at embedding the BSC.

The Design and Process category contained three factors and the researcher proposed a fourth. Each of these factors were found to impact BSC implementation, consistent with the research. The first factor was assigning KPI owners, this created a culture of accountable for delivering on their given portfolios. This factor interlinks with elements of the Strategic Human Resource Management category, such as cultural acceptance, so as to avoid a blame culture within the organisation.

The second success factor within this category was quadrant balance and evolution. Commentators (Fiondella et al., 2016; Hepler et al., 2016; Grigoroudis et al., 2012; de Waal, 2003 and Kaplan & Norton, 1992, 1993, 1996 a-c, 2001 a & b.) suggest that using a balanced set of measures is an essential aspect of performance measurement. In healthcare this concept of balanced measures created a challenge because of the past culture of finance is 'king'. They also faced the temptation of focusing too much on different areas, such as quality, patient safety, or workforce measures, creating an unbalanced picture. The long-term survival of a BSC system was shown to be influenced by the extent to which indicators or measures are regularly reviewed and feedback provided. The findings also showed that the organisations when implementing a BSC needed to be careful of the common tendency to continually add measures but to not remove outdated ones.

The third critical success factor within this category is data quality and information flows. To achieve a robust data feed, the organisation needs to have appropriate information and reporting systems in place. The findings supported the fact that provision of accurate information in a timely and appropriate manner was very important to successful implementation of the BSC.

The findings confirmed the fourth critical success factor proposed by this researcher which was the importance of managing all of the organisational stakeholders, both internally and externally to the organisation. This factor was shown to have a large effect on the successful implementation and embeddedness of the BSC.

As noted earlier the first factor in the Contextual Integration category is not relevant to the Australian setting. The second critical success factor within this category was UK healthcare regulation. The regulation of healthcare services within Australia also continues to evolve and keeping up to date with the latest requirements is of utmost necessity for healthcare organisations, especially as typically it is linked to funding. The government regulations and guidelines involve the necessity to meet a range of measures, and it was tempting for organisations to integrate them all into their BSC system. The organisations needed to agree upon the approach that ensured that the regulatory requirements were covered within the context of their BSC system, while still maintaining their local strategic focus.

Strategic human resource management category had three critical success factors; this researcher proposed a fourth based on the findings of this research. The first factor is management competency. This relates to senior management's skills and competencies to facilitate the effective operation of a BSC system. These include listening skills, planning skills, or emotional intelligence. While the individual characteristics of top management were not examined in this study, the findings showed that the skills of the Champion in particular, were extremely important in the successful implementation of the BSC, as was the competence and belief in top management.

The second critical success factor in the category was organisational learning. This research found that organisational learning needed to be planned for right from the beginning, as there will be some past learning that may need to be modified, before moving forward with the BSC can be achieved. The organisation needs to understand the reasons for the change from the

previous system. It was also found that an open culture of feedback and employee involvement facilitated organisational learning further. When an organisation did not learn from its past mistakes, then it is more susceptible to falling into those same mistakes. This occurred in several of the organisations examined and contributed to the lack of successful implementation.

This research also confirmed the importance of the third critical success factor relating to strategic Human Resource Management which was the specific role of cultural acceptance and buy-in from organisational members into a BSC system. Key stakeholders within an organisation needed to be fully signed up and appreciative of the role, purpose, benefits, and obligations of the BSC for it to be successfully implemented. Support, for example, in the form of consensus building and teaching, was required to embed the BSC.

In response to Research Question 3b the following discussion will identify the barriers to the successful implementation of the BSC. The fourth critical success factor proposed by the researcher is the need for top management and the Champion in particular to have the skill and knowledge to handle the known barriers to success within both the healthcare sector and their organisation in particular. The barriers identified included: a top-down approach, use of jargon, too many measures, quantitative versus qualitative measures, process breakdowns, detractors, lack of trust and openness, traditional focus on financial and quality measures, combined with limited time, funding and resources.

These findings are consistent with the findings of Niven (2002) who identified the following issues as particularly relevant to the public and not-for-profit sectors: the difficulty to develop appropriate measures to capture what they are doing; the fear of a hidden agenda or that results will be used to punish; political issues such as the public's view of negative results; why invest in something that will only last with the current administration?; culture of not trusting business (private sector) solutions; where does our mission fit; and lastly but most importantly, no burning platform to change. The findings revealed the need for a change agenda was important and that the organisations that successful implementation of the BSC utilised a change agenda.

The researcher proposed that another missing element from the model for the success of this type of implementation is the overriding importance of it being very much driven as a change agenda. So, the model needs to include this major critical success. The findings showed that

the organisations who successful implement of the BSC also employed a whole change agenda project for their BSC. It was also found that if the organisations promoted the BSC as a change agenda, then those changes needed to be observed along the way to maintain stakeholder's involvement. Where the employees observed the changes, these organisations were able to successfully embed the BSC within their particular healthcare organisation.

In conclusion, as can be seen from the discussion of the findings in this chapter, it was possible to develop and find support for both the BSC Adoption Model (RQ1) and the Critical Success Factor Model (RQ3a and RQ3b). Also, it found evidence that either the charteristics of the organisation or the characteristics of the healthcare sector i.e. cultural factors (RQ2) impacted the organisations either organisational, technologically, sociologically or politically and these impacts affected the BSC adoption and implementation process.

In this chapter we discussed the findings for Research Questions 1 to 3, to establish evidence of the factors that comprise the BSC adoption model, the characteristic/cultural diagram and the critical success factor model. In the next chapter we will outline the case studies used to examine Research Questions 1 to 4.

CHAPTER 5 - COMPARATIVE CASE STUDY FINDINGS

This chapter contrasts two case studies identified through the interview phase. The chapter follows the same format as outlined in the conceptual framework, to examine Research Question 1 to 3 and Research Question 4 (stated below). That is, they are presented in accordance with the major factors and themes that were used to develop the models, over the course of the interviews and the coding process. Hence the section headings are; adoption factors, organisational and healthcare characteristics/culture impacts, CSF in the process of implementation, barriers, change process versus compliance and outcomes/roles of the BSC.

The two case studies were organisation A and C supported by Interviewee 1 and 3. These case studies were chosen because of the contrast that became apparent between the different approaches toward the adoption, implementation of the BSC and process used to attempt to embed the BSC. The researcher also had the opportunity to be involved as an observer in the implementation process and was provided with additional documentary evidence of the BSC and resources around the BSC, the implementation of the BSC and the outcomes of the BSC project within these two organisations.

Interviewee 1 left organisation A for organisation B, but the BSC was well and truly embedded within organisation A and continued to be used after she left that organisation. Interviewee 3 thought the BSC was embedded in organisation C when Interviewee 3 left the organisation, but it was not. It stopped being used as a strategic management system shortly after Interviewee 3 left. This raised several issues in the researcher's mind. The two Champions seemed to have the same knowledge of the BSC and were educated pertaining to the same necessary processes to achieve successful implementation of the BSC, so why the vast difference between the outcomes of the two organisations? This led to Research Question 4.

RQ4: Are there similarities and differences between healthcare organisations that impact either the adoption, process, or roles and if so why?

The following sections are the findings concerning whether the similarities and differences between the two organisations impacted the factors of adoption, or the

critical success factors during the implementation process, (RQ1-3) or the outcomes and/or roles performed by the BSC (RQ4) within these two organisations.

5.1. *BSC Adoption Factors (RQ1)*

The discussion that follows is pertaining to the similarities and differences between organisation A and C concerning BSC adoption factors from Research Question 1 and Model 1. The findings are summarised in Table 5.1 the BSC adoption effects and Table 5.2 BSC adoption factors (refer pp 195, 196).

5.1.1. Support

5.1.1.1. Top Management Support

The importance of top management support was noted as the second (after champion) most important factor about successful implementation of the BSC. Organisation A where the BSC continued, had the advantage of not only having a champion, but also having strong support and encouragement from their top management.

> *"a difference in the early stages with organisation A, was that the DM* (district manager) *was studying a Master in Business and was quite a charismatic leader who had quite a good standing amongst his executives in terms of his business ability… and he already knew about the BSC so once he knew … it was coming to organisation A, he was selling it in a very optimistic and positive light."*

She felt that without the District Manager's support it would have been extremely difficult to implement. This is because people in organisations that were linked to the head organisation were very cynical about planning processes that had come and gone.

Interviewee 1 made frequent references about top management support and noted that one of the largest influencing factors of adopting the BSC at an organisational level was, the engagement of the executive teams with the BSC methodology. She observed that those organisations that had leadership teams that were less familiar with the BSC methodology or that had treated it merely as a process exercise stopped once their map was developed (as in organisation C). The areas in which Interviewee A observed

change was at the district hospitals like hers (organisations D and J) where the executive teams had engaged with the BSC methodology and had made an attempt to start implementing the plan and not just abandoning the BSC at the development stage.

At organisation A, even though the District Manager changed three times while the plan was being developed, the executive team was fairly stable, and they were a coherent group. The executives knew each other's personality types and how they functioned, so whenever they were in a room together there was a high degree of openness. The executive team each took responsibility for part of the reporting process, so when the reports hit the table and needed to be discussed, they had intimate knowledge of the subject matter to lead very detailed and analytical discussion. This allowed them to push the change forward and communicate it throughout the organisation.

In organisation C, the level of support from the executive team varied greatly. Behind closed doors there were some strong personalities within the organisation that were saying, '*This is rubbish*'. The District Manager thought the whole idea of the BSC was excellent, he saw it as a great tool. Although he felt that once again head office would not put enough resources into the BSC, and it would end up falling in a heap. So, they did it as requested but did not expect it to last. Outside of the team meetings they were all saying, '*we love it*' and then behind closed doors they vented that they did not really want to do it. This organisation had a history of this attitude to other change programs.

At organisation A the executive lead by example as soon as the district scorecard was completed the executives had one month to write their own performance appraisal and development plans using the new district template. Then it was cascaded down to the next level. It worked very well because people for the first time knew that their executive director had a performance appraisal and development plan, in the past they did not but were still pushing other people at lower levels to have plans.

> *"So, there wasn't the argy-bargy that there had been in previous years about having a performance appraisal and development plan."*

This approach worked extremely well, because it was appropriate modelling of behaviour and in fact organisation A received a commendation from head office for the

way they went about their strategic planning framework. This highlighted that the executive team's leadership was definitely a critical adoption factor in healthcare.

In organisation C top management allowed their staff a half day leave from work and their duties to meet with interviewee 3. Top management were only concerned that the BSC meetings did not interrupt the participants work and/or patient care. This attitude made it hard to find appropriate times for meetings because of employee's rosters and getting engagement from employees outside of their duty times. To the researcher this gave the appearance of support but did not send the correct message throughout the organisation that this BSC project was important and that top level were engaging with it and supporting the BSC aims and objectives.

The District Manager and some of the executive team '*bought in*' at organisation C, according to interviewee 3 who also believed that if it had not been for the District Manager's support that the BSC project would not have been even begun. They had a period when the District Manager went away for two months, during that period of time the BSC started to grind down to a semi halt. It was just through the champion pushing and arguing with the executive team that they were able to keep going and that was because a key player within the executive team did not like it was put in charge while the District Manager was gone. It was a difficult period of time for organisation C, the Champion felt that unless the key executive team bought in and supported it, the project would crumble, which in the end it did, in their organisation.

So, having a major champion of the project in the district on the executive team as well as the District Manager on board was essential. With the support of the District Manager, people within the organisation could see it was not just a head office directive because the District Manager was endorsing it and saying it is their opportunity to develop something great for the district. When the District Manager supported the BSC in organisation C, then the personnel also came on board. Unfortunately, even this support ceased because of the lack of support from the whole executive team.

Having mixed support at the top made it difficult to trying to implement the BSC in organisation C. The attitude within this organisation was very much this BSC is just another head office project, that '*hopefully will go away*'. Interviewee 3 noted that,

> *"they just want to spend money on projects and they never work and all they want us to do is do more work for less money. They don't give us any resources, it's just more and more work."*

This factor was a major difference between the two organisations (A & C)

5.1.1.2. Champion

As noted in chapter 4, consistent with prior research (Shields, 1995; Foster and Swenson, 1997; McGowan and Klammer, 1997), all of the interviewees stated several times how important it was to have a champion for the BSC project to be successful, the Champion was often stated as the most important factor. It was observed that the role of the champion needed to be a permanent position to successfully embed a BSC.

Interviewee 1 from organisation A where the BSC is still in existence, noted that they thought it was so critical that they funded the driver (champion) from local funds after corporate funding was withdrawn for their project officer.

> *"Something different about organisation A is they kept funding me (driver) after the plan was developed for at least another six months and in that time period I developed and led the cascaded score cards with the executives of each of the divisions and I also kept up with the stakeholders to look at how we were going to implement the initiatives so I took care of the initiatives with the executive team."*

The importance of the way that the Champion went about the process was also identified as a factor by Interviewee 3. She stated she wasn't told that she had to employ a communication strategy, she was told that she didn't need to involve the lower level employees but after some research on the internet about how it actually works and how and what she should do in order to have an effective implementation, she realised that she needed to communicate with and include them. That is, the Champion educated herself concerning the appropriate BSC process, but she found it hard to get support

and buy-in from the executive team, as the executive team saw it as a 'compliance' project, not as a strategic or change project.

At organisation C (which stopped the BSC very early) Interviewee 3 had limited time with the whole executive team, and the project sponsors. This made the Champion's job extremely difficult, as little value was placed upon the importance of the BSC to their organisation. Even though she found her own understanding of what implementing a BSC required, she found it hard to educate the executive team on this process, let alone the rest of the organisation. She was also employed at quite a lower level than the other Champions, so found it hard to be heard and respected. She also was not given enough 'airtime' with the stakeholders to progress the BSC project as necessary.

There did not appear to be any observed individual/personal differences between the two champions. They both understood the BSC and the processes involved in implementing the BSC, they were both driven people who were in total support of the advantages the BSC could bring to their organisations. They both had good salesmanship skills, and similar years and experience within healthcare. There was no observed major difference in the individuals to explain the difference in outcome. Although further research could be done in this area, similar to the individual's values component of Marie Kavanagh's (2002) Model of the effects of Individual Values, Organisational Culture and Method of Acculturation on Merger Outcome.

So both organisations had an educated and driven champion, but the level of support provided by top management to the champion varied greatly between the organisations, from total support and understanding by organisation A to lack of support and not wanting to understand but just tick the box, in organisation C.

5.1.1.3. Consultants

As seen in other research (Madsen and Stenheim, 2015; Nørreklit, 2003; Kasurinen, 2002; Booth & Giacobbe, 1998; Bjornenak, 1997), the consultants were mainly involved in the early stages of adoption and training the project leaders, and for a brief period to evaluate some projects.

Interviewee 1 noted that the external consultants were providing some input throughout the process and even when she moved to the head organisation, they were still providing consultancy input probably from the perspective that it was a new technique for that organisation. Some staff that had originally been trained by the external consultants then developed training packages. From then on, the consultants were basically utilized as a sounding board, so that if the organisation hit a roadblock then the consultants helped them to draft some solutions to some of those problems.

> *"They also carried out an evaluation,... to evaluate the success of the implementation across the organisation but ... the evaluation very much focussed on the success of implementing the processes of the BSC and what we were hoping to see much more was the success of the outcomes produced and the change produced by the scorecard and that was not easy to determine because each district had their own local level (evaluation)."*

This factor (Consultants involvement) did not appear to give any explanation for the difference between organisation A and C's success or not.

5.1.2. Organisational Size and Complexity

Consistent with prior research, (Otley, 2016; Chenhall 2003; Hoque & James, 2000; Krumwiede, 1998; Bjørnenak, 1997; Clarke, et al., 1997; Van Nguyen & Brooks, 1997) Interviewee 1 seemed to have very few difficulties trying to get an effective BSC into a large and complex organisation.

As part of their process organisation A engaged all of the stakeholders very early in the process. All stakeholders were invited to have input into the process and the development of their future plans for the hospital. They were invited to put forward their priorities in terms of what should be measured and what should be focused on first in the BSC. These stakeholders included allied health, local general practitioners, people who provided community programs like, Quit Smoking, Asthma Management, Mental Health Facilities, Aged Care providers, and local Ambulance station managers.

Contrary to prior research, Interviewee 3 noted the difficulty of trying to get an effective BSC into a large organisation. She noted that for the head organisation, being so big and so diverse and so spread out over many areas she thought their scorecard, was a '*little motherhoody*'. It tried to encompass everything that the head organisation had to do. The researcher notes that this is contrary to what the BSC literature (Kaplan & Norton 1992, 1993, 1996c, 2001a & b) says about how to create a BSC, it states an organisation should focus on a few strategic areas. So, size and complexity of their BSC had a negative impact on the implementation of the BSC in organisation C, as they tried to include too many objectives and not think strategically about what their first priorities should be. It was too hard to get common consensus because of the divisional silos.

5.1.3. Compatibility

The interview process established that there were many different aspects to compatibility in the views expressed by the interviewees. These different aspects included; compatibility with the organisational structure, compatibility with culture, compatibility with political environment and government regulation, and compatibility with the information technology systems. Some of these aspects will be discussed here, others will be addressed as part of the impacts of the Organisational Characteristics in section 5.2.2.

Compatibility with culture was a real issue between these two organisations, as can be seen from the following discussion of inbuilt belief structures within these organisations and healthcare generally: i.e. traditional focus on finances; impost in day to day business; and culture of cynicism, old school views and territorial.

Healthcare has always had a focus on finances, which are typically tight, particularly in the public sector and it is hard to break that traditional way of thinking within some organisations. Clinicians on the ground level and staff throughout the organisation felt that the managing of finances was perhaps at the expense of other parts of the organisation, for example the workforce and service delivery and consumer outcomes.

Organisation A realised that they could not just focussed on finances they also had to be focused on outputs for their stakeholders. They had to focus on their staff, and they had to focus on their processes and that did not always mean doing it the cheapest way. They developed a BSC that reflected a more appropriate balance between their four quadrants and the measures they choose to focus on first. They also developed a business plan that was strategic in nature and that involved co-operation and synergies across several other district organisations for different initiatives they then championed.

Organisation B, head office, started linking funding to strategic initiatives, therefore organisation A decided their priorities and then developed Business Cases around their priorities to present to head office to increase their funding. Once organisation A had established their goal and objectives through the BSC, they also engaged other districts to join with them as part of some of their Business Cases.

Whereas at organisation C, most of their meetings were old school discussions of how each division could get their share of the funding. The doctors just wanted more money to go about their day to day business and did not appear to want to think strategically with a long-term focus. She could not get the executive at organisation C to see past the day to day operations and recognise the advantages of a more strategic approach to operations and finance. For example, as soon as head office stopped funding the project her position was stopped and they focussed on getting a new ward to open, no one tried to embed the BSC.

Because the District Manager and executive team at organisation A were already sold on the BSC and its importance and relative advantages to their organisation, there was not this attitude of only focussing on the day to day demands. Their attitude become if they all listened to each other and decided priorities together they could achieve great synergies. They could achieve long-term benefits rather than using short term fixes. At organisation A another important factor was the degree of openness in the executive, and their ability to take this on as a change project, a new system replacing the old.

Whereas at organisation C there was not a culture of allowing their personnel to openly put forth their ideas and they could not have open discussion and debate concerning the

best course of action. She noted that there was also a culture of '*it's OK to add to business but we don't take anything away*'. This created problems within the organisation as they attempted to add the BSC onto what they were already doing, rather that replacing the old Performance Management System with the BSC. Within this organisation it led to people complaining about the additional workload and wasting their time, as the same information was already being captured in the Quality framework. So, the personnel's perceptions were a major hurdle for organisation C. Even the District Manager who thought it was excellent and liked the whole idea of the BSC, believed head office would not fund it appropriately and it would end.

As noted by one of the other interviewees, in large public sector organisations, there is a high level of organisational cynicism to change efforts, and that's breed up through change efforts which are tied to a particular agenda or person. This was particularly the case with organisation C. The cynicism was so in breed that the Champion could not overcome the widespread view that this was just a temporary exercise.

5.1.4. Information Technology

Information technology is another critical success factor for BSC implementation. The discussion below will illustrate the importance of four different aspects of information technology: quality, compatibility, usability and the existence of a quality management framework, and each aspects effect on the BSC implementation process.

5.1.4.1. Information Technology Quality,

Interestingly organisation C had few issues with the information technology side of collecting and reporting data, as they had a really capable information technology team who engaged with the project. She had a great rapport with the Information Technology department, so they developed an online measurement reporting system for organisation C. It was web based so that meant that the person who had to do reporting for a measure logged in, selected their measure and then filled in the appropriate fields. The program would format it all into a nice report and it would do the graph for them and trends, so that all they had to do was log in when the time for reporting came and just hit print month x of the report and it would just printout the reports that were due for that week's meeting.

So technology wise interviewee 3 thought organisation C was always an organisation that was more information technologically advanced than other districts. Organisation A used excel for their reports and were satisfied with the quality of the reports produced.

5.1.4.2. Information Technology Compatibility

In organisation A they just selected either a Word or an Excel template and had an agreed process internally about where it would be stored, how it would be shared and who was going to do the administrative tasks. When organisation A first started to report everyone would just send their reports through to her and she would do the final check that they had all the reports and do the photocopying for the meeting because they preferred hard copies of the reports to discuss them in meetings.

When asked 'where would you get this data from?' Interviewee 1 noted that in a lot of cases in the first round of scorecards they had a column 'To be developed' and it stayed that way for a lot of people because there wasn't a lot of readily available data at the district level apart from activity related data. Organisation A had a plethora of activity related data, but they didn't have a lot of access to data that might have informed them concerning health outcomes; there was not much access to different types of data. Even the Human Resource database systems were found to be unreliable in a lot of cases for certain types of Human Resource information so there was a lot of debate about whether they should be trying to use those data systems at all. They knew they were unreliable, so needed to decide whether they should develop their own, how much time would that take and how much resources would be required so that was another issue they faced.

5.1.4.3. Information Technology Usability

In organisation A the Information Technology story was very different to organisation C, they created their own system that their personnel agreed to utilise. Interviewee 1 stated that the reporting mechanism between districts and to head office was a problem from the initial stages. The organisations wondered whether having a linked database might actually improve the sharing of information between districts at a zonal level and between all districts and zonal levels and head office.

Interviewee 1 noted that…

> *"The interesting thing has been that peoples' Excel skills which is what the original reporting format was in, actually held back a lot of districts from being able to report effectively because the majority of district staff at the time did not have proficient Excel skills to report efficiently so they were still trying to learn how to use Excel and report at the same time and that was blowing out the administration time and increasing peoples' frustration".*

In organisation A there was strong leadership shown by their executive team, in that the executive member wrote their own reports pertaining to the measures they sponsored, and then they lead the discussion on those measures during the meetings.

In terms of the technology related reporting, she thought there was too much emphasis placed on the need to find a solution by districts. At the end of the day they trialled a number of systems to help collect the required information and create templates to store and analysis the collected data. In a lot of cases, the training that was invested in familiarising staff with that system was not worth the outcome that they got. It was much better if people selected a reporting template that their staff were familiar with using, which is why organisation A developed one in Word and one in Excel.

5.1.4.4. Quality Management Framework

As noted already within organisation C people complained about the additional workload, as the same information was being captured elsewhere. So, organisation C personnel were asking why they were wasting their time doing it again, when it was already being reported in the Quality framework. So rather than choosing the most significant quality measures and feeding them into the BSC to help them focus on their priorities, they tried to run two separate systems with little integration and increased workload.

Whereas in organisation A they integrated their measurement systems and created a whole new system, to replace the piecemeal, add on approach in the old system. They achieved synergies out of incorporating the only the high priority quality measures into their BSC, rather than including all quality measures.

5.1.5. Perceived Relative Advantage

Advantages and benefits that were mentioned by interviewees 1 (organisation A) were:

> *"it gave them a more streamlined direction in their organisation. Everyone even in rural areas and people at all levels of the organisation including the food services people knew about the plan; and when the DM went for a walk around they showed her what they had done that aligned to one of the objectives on the plan, that was relevant to their area and that they had actually saved all this money, … by doing something with their store room."*

They felt that the concept of the BSC allowed them to communicate the direction of the organisation really well. Especially with the map it is very simple to read, unless you used too much jargon.

They cascaded it so that everybody had a purpose towards a bigger outcome that was relevant to their work area and it was able to be communicated well. It kept personnel within the organisation focused on the whole big picture and each meeting they would review the picture, this had not been the traditional method of planning before. The BSC at organisation A was widely accepted and embedded into their daily routines.

Interviewee 3 (organisation C) said that the advantage of the BSC was that it made them focus on the four different areas (quadrants) instead of focussing on the two that they did normally. The researcher noted that little was said about the relative advantages of the BSC throughout the interview. So, it appeared that the advantages were verbalised but not put into action, as the resistance was too strong to allow the BSC to embed and reap the rewards that could have been achieved.

Hence, acknowledging the potential advantages, did not guarantee the achievement of those advantages for the organisations, even if the BSC was implemented.

Table 5.1 summarises the findings for Research Question 1 concerning BSC adoption factors in organisation A & C.

Table 5.1 Summary of BSC Adoption Factors

Adoption Factor	Organisation A	Organisation C
Champion	Driven	Driven
	Educated at the start	Self-educated after ill-informed
	Knew the process	Tried to learn on the job
	Huge communication	Told not to communicate – Exe.
	Strategic change	Compliance
	Executive level appointment	Lower level appointment
Top Manag. Support	Total support & encouragement by DM & Executive	Divided support: DM yes, Executive - mixed
	Viewed as permanent change	"Fad & fashion" philosophy
	Engaged positively with the method	Hoped it would go away
	Openness & sharing	Divisional/Distractors
	Executive took ownership, reported, analysed & discussed	No ownership, brief reports then reverted to operational
	Led by example, with own Professional Development Plan	Disruptive, shut down temporarily while DM away @ critical measure choose stage
	Total acceptance of the BSC	Lot of convincing with minimal support
Consultants	Useful at beginning, used for review at end, not part of the process	Useful at beginning, used to review at end, not part of process
Size/Complexity	Positive impact due to stakeholder's engagement in the process/priorities	Too many measures because stakeholders wanted own priorities no combined strategy
Compatibility	Values- very good	At odds with traditional values
	Co-operation	Not even internal co-op.
	Became long-term focussed	Maintained short-term focus
	Made strategic business plans	Operational plans ruled
	BSC became day to day business	Operations remain day to day bus.
	Took it on as their own project because saw the advantages	Cynicism ruled
QMF	Integrated	Ran two QMF systems
IT	Needed training	Well developed
	Came to compromise on best medium to report in – Excel vs word	Integrated, single report produced by the system
	Learned to use, simplified reports	Easy to use
Relative Advantages	Regularly verbalised	Little evidence shown
	Demonstrated examples were provided	General agreeance that it should have provided advantages

Table 5.2 summarises the findings for Research Question 2 concerning the effects of these BSC adoption factors in organisation A & C.

Table 5.2 Summary of BSC Adoption Factors Effects

	Org A	Impact				Org C	Impact			
Adoption Factors	+ve or -ve	None	Small	Med	Large	+ve or -ve	None	Small	Med	Large
Champion	+				X	+				X
Top Manage. Support	+				X	-		X	X	
Consultants			X					X		
Size/Complexity		X							X	
Compatibility										
TQM	+		X	X		-			X	X
IT				X		+			X	
Industry Characteristics			X			-			X	
Organisational Characteristics	+			X		-			X	

In both organisations they had a strong Champion who worked hard and understood what they were trying to achieve with the BSC and tried to achieve buy-in by all stakeholders. As the critical success factor process analysis in Table 5.4 illustrates the process difficulties appears to have outweighed the influence of a strong Champion.

Top management support was seen as important from both Interviewees, but the support at organisation A at all levels was described as large and was sustained. The top management support from organisation C varied greatly and was not sustainable over time. As negativity from some key personnel lead to a breakdown in support, especially with the doctors who believed that these funds should be spent elsewhere.

The role of the Consultants was the same for each of the organisations, the consultants influenced the process greatly at the start and in educating the Champion, but lacked impact during the process, although they were of some help in reviewing at the first

reporting stage. So overall the external consultants appeared to help at the point of choosing to adopt the BSC but had little influence during the adoption process itself.

Both organisations were large in size and were comprised of very diverse departments which created a complex environment for each organisation. In spite of this organisation A did not seem to be negatively influenced by this environment and embraced its diversity and size by engaging and communicating with every level right down to the cleaning department and the community partners. Size and complexity did prove to be a problem for organisation C, who struggled at times to get consensus. They had division amongst the ranks and departments.

Compatibility was a major issue for organisation C. The traditional focus on finance, was hard for them to move away from, but when they did operational issues were focussed on, strategy was not incorporated in most discussions or measures. The organisation was very cynical about this new technique and saw it as a passing 'fad'. It was very much seen as an impost on their day to day business. As a consequence, their focus remained short term.

Whereas organisation A, the advantages of not being so finance oriented and recognising the links within the four quadrants of the BSC, and how all quadrants contributed to the organisational success, they overcame this barrier. They saw the BSC now as day to day business, and hence were more strategic and long-term focussed. Cynicism was not tolerated.

Total Quality Management systems in this study had different effects on each of the organisations. In organisation C, they tried to include too many of these government required measures into their BSC, and ultimately decided they did not wish to report this data twice and dropped the BSC project to concentrate of the Quality Framework Accreditation. Whereas in organisation A it had a positive impact, as they integrated the data collection systems and only choose a few key quality measures for their BSC.

Information Technology issues appeared to be minimal in organisation C. In organisation A, they had to educate their staff in the use of the software, then they created a user-friendly reporting system.

Having discussed each of the factors as they relate to the BSC Adoption model, the next section will discuss the organisational and healthcare characteristics and culture that impacted both the BSC adoption model and the CSF implementation model.

5.2. *Organisational & Healthcare Characteristics/Culture Factors (RQ2)*

This section discusses the organisational and healthcare characteristics and culture that impacted both the BSC Adoption Model and the CSF Implementation Model (RQ2). These factors have had either an organisational, technological, sociological, or political impact on the organisations. These factors include such issues as mandated adoption, internal divisions, strategic versus operational planning, competing priorities, aging population and workforce shortages. The findings are summarised in the Table 5.3 (refer p. 203).

5.2.1. Mandate

Something unique to both organisation A and C was that they had the BSC mandated upon them, rather than chosen by them, and this was seen to have a negative impact on its adoption within organisation C. They had not chosen the BSC, therefore did not understand what use the BSC could be for them, nor did they think it was compatible with their goals, plans or objectives. They also realised that a change of culture would be necessary to achieve the BSC project, which was resisted within their organisation.

Because of the approach taken by Interviewee 1, the District Manager and the organisation's executive team, they did not seem to have the same issue with "*this is just a fad*". But the fact that this mandate changed and was unclear over time did have a negative impact on the adoption of the BSC in several other organisations, including organisation C.

Interviewee 1 thought that because there was not ongoing communication from the highest level of the organisation that the BSC was still supported by the executive team at head office, then confusion ensured for other district organisations as to the need for this change in structure or culture.

She thought that a vital factor was having the executive, modelled the right behaviour and demonstrated to the organisations personnel that they were expected to follow through. Communicating clearly that it was not an optional extra, but a very important part of the way in which the organisation planned and operated. That is, the message needed to be clear that the BSC was compatible with the organisation's structure and new culture. Organisation A ended up resourcing their BSC project on their own, because they understood the time needed to implement the BSC and to change culture and 'operatus morandi'.

Interviewee 3 noted that none of their executive management team were excited concerning the BSC project, they were in fact against it, because it was viewed as another head office requirement. If someone within the district had initiated it she thought the executive and other organisational personnel would have been more on board from the start but because they saw it was a directive from the head organisation that they had to do it, then they were against the BSC project from the start.

5.2.2. Organisational characteristics affecting Implementation & Behavioural Impact of the BSC

5.2.2.1. Internal Division

Interviewee 1 raised the internal division issue within healthcare organisations. The different values between the clinicians and management were highlighted within the organisation when measures were chosen for each perspectives on the BSC. The clinicians thought that psychologically it would be better to put finances at the bottom because they perceived finances as a driver, an enabler, rather than as having a certain amount of outcomes in itself. The personnel within organisation A …

> *"felt that all of the change had been driven in financial according to financial constraints in the past and now they wanted to talk about change*

in relation to other things apart from finance and this was giving them a little bit of hope that they might actually think about their workforce and planning and they might actually think about their consumers as well as changes in service delivery …".

During the implementation process they managed to breakdown some of the divisional silos and treated all personnel as being an important part of achieving the positive outcomes for their clients (stakeholders).

At organisation C different groups had very different levels of buy-in and support for the BSC. The doctors seemed to be the hardest to sell to. The replacement District Manager was a top doctor and hence held sway with the other doctors, telling them that it was an impost on their day to day duties and was just something to add to their workload. Organisation C achieved some buy-in from the allied health practitioners but found it very difficult to cascade it downwards especially as the champion was given little time to consult and engage with the broader organisational community to gain their input or understanding of the BSC.

5.2.2.2. Relationships

In organisation A the interviewee talked in terms of the importance of their relationships with both their internal and external stakeholders as discussed in section 5.3.6. Whereas in organisation C the importance of relationships did not carry the same relevance and was not mentioned.

5.2.3. Healthcare Sector characteristics affecting Implementation & Organisational Impact of the BSC

5.2.3.1. Competing Priorities

It was identified that a critical factor in the adoption process of the BSC was that organisations focus often changed because of the need to address an immediate problem. What contributed to the fall of the BSC process, within numerous of the district organisations, was that politically it was not a very good time for healthcare due to negative press. Hence, the head office found themselves in trouble elsewhere and other problems came down all around them and a new executive commenced. And the

BSC was not on the agenda anymore. This gave organisation C the perfect excuse to now drop the whole project, whereas organisation A was determined to see the project through.

5.2.3.2. Strategic plans versus Operational plans

Because of what had happened politically especially the bad press, concerning what happened at organisation Z, a lot of the districts have reverted back to before the BSC. The districts went back on their own and it was once again district based with their own logo not organisation B's. So, the political environment was an issue, as was the feeling that organisation B was not heading in the new direction, but that there was in fact no direction for organisation A and C to follow.

Organisation C knew it needed to strategically plan but when an operational issue arose that they must address because they are under pressure to address it from the community and from politicians, they focused on that issue not strategy. Interviewee 3 discussed how healthcare organisations often struggled with future planning and trying to plan towards meeting changing consumer expectations cause there are a lot of lobby groups in health, as well as the issue of competing for a space on the executives agenda.

Interviewee 1 reflected that in the past, it was common knowledge that some organisations drafted the strategic plan and it literally sat in the drawer of the District Manager. The development of the strategy plan was a compliance exercise. There was nothing more really done with that strategic plan and it was not even really tied to operational planning at all. Organisation A made sure their plan was operationalised.

5.2.4. Healthcare Sector characteristics affecting Implementation & Socialisation & Political Impact of the BSC

5.2.4.1. Ageing Population issues & Workforce Shortages

Interviewee 1 identified that the community expectations of health have grown over the years, and new technologies had been developed but the funding was not available to transform these machines into mainstream medicine. Hence this level of hospital care has not always available because they were quite expensive interventions. Interviewee 1

discussed that increasingly into the future healthcare organisations were going to face ethical dilemmas around, providing interventions and keeping patients alive versus quality of life of the patient especially for their older populations. Organisation A were experiencing a skewing in the population demographics. Interviewee 1 stated that:

"The concept of equity in service to everyone has always been an issue in health".

Interviewee 1 thought this framework provided an opportunity to be quite transparent about what their future direction was and what type of care they were moving towards.

Healthcare organisations are also looking at, acute workforce shortages that despite the best of planning will have a massive impact on their ability to meet the community's needs. Interviewee 1 believed to some degree this BSC framework would allow them to evaluate the outcome of some of the changes that they put into place in the longer term and to drive some new initiatives and changes, but she was not sure if organisation A could keep up with community demands. Although Interviewee 1 struggled to see how the BSC could help them with some of their immediate issues around workforce shortages.

At organisation A their population was already expanding and aging. They knew that because they had seen the farmlands open up, and the retirement villages built and hence they knew that there was high degree of growth around the area. So, the BSC gave them a good framework to articulate not only some of the issues that they were facing but, some of the solutions in a very organised way. These issues were in various domains of the organisation and not just in financial perspectives.

Whereas organisation C even though aware of these issues of workforce shortages and an ageing population, at their executive meetings there was minimal attention given to strategic planning for resolution of these issues they choose to deal only with immediate workforce shortages.

5.2.4.2. Politicisation

Interviewee 1 thought there had been some matching of community expectations and political promises to the planning framework. She felt she would be less than honest if she did not state that there was a high degree of politicisation of healthcare and there

always has been and to some degree it prevents them from being proactive and keeps them in the domain of reactive. Hence, she does not always blame the District Managers for being so operationally focussed because it was those issues that sparked the reaction in the community and in the political sphere and therefore, they were always putting out the fires. It was noted by the researcher that during this time period (i.e. implementation of the BSC) the local papers for the area in which organisation A is located began to print encouraging and positive pieces around the changes and outcomes of the change within organisation A and its priorities and engagement with the community stakeholders.

Unfortunately, in organisation C, their circumstances were the total opposite. Politics was behind everything that happened within the organisation. Both internal and external politics were observed as effecting this organisation. They were finding themselves portrayed negatively within the local media on a regular basis. Also, media was being used as a threat by some employees who wanted processes done their way.

Table 5.3 Summary of BSC Cultural Factors (RQ2)

Cultural Factor	Organisation A	Organisation C
Internal Divisions	Barriers were broken down	Definite Silos & resistance to work together
Mandated	Accepted as theirs	Resistance/ rejection
	Communication that reinforced the need for them to have the BSC	No clear direction, and lack of communication
Politics	Managed & Positive outcomes	Destructive inside & negative press
Aging Population & workforce shortage	Acknowledged & planned for Workforce strategies in place	Ignored, just rhetoric, just solving immediate fires (shortages)

The findings in this part of the research highlights some of the major reasons that the BSC was successful in organisation A and not in organisation C. This is that the Internal Divisions were broken down in organisation A, but there were definite silos and resistance to working together in organisation C. The mandated project was accepted as theirs in organisation A, but was met with resistance and rejection in organisation C. Organisation A communicated and reinforced the need for them to have the BSC. In organisation C there was no clear direction, and lack of communication. In organisation A politics was managed and there were positive outcomes, whereas in

organisation C it was destructive internally and lead to negative press. Aging population and workforce shortage was acknowledged and planned for in organisation A, but organisation C had no workforce strategies in place. Organisation C remained focused on solving immediate shortages.

The findings discussed in this section have contributed towards practice because it highlighted how 'achieving cultural acceptance' was a major part of the work of the BSC project by the Champions within the successful organisation. Therefore, practitioners need to understand their own culture and the possible effects on the implementation of a BSC within that culture. The communication and education process are critical in achieving this cultural acceptance. Based on the characteristics of these organisations and healthcare generally, there were three major areas to address to overcome the resistance, i.e., traditional focus on finance, divisional silos and the impost on day to day business, and the view that these new systems were just 'Fads' or compliance exercises. This knowledge will help the practitioner to be mindful of the current culture within their organisation and educate themselves around how to manage these cultural issues.

Having discussed the organisational and healthcare characteristics and culture (RQ2) that have impacted both the BSC adoption and implementation the next section will discuss each of the factors from the CSF model as they relate to the two case studies.

5.3. *Critical Success Factors in the Implementation Process (RQ3a)*

The following is a discussion of the CSF found to impact the adoption and implementation of the BSC within the two case studies, these factors fall into four categories examined below.

5.3.1. Strategic Purpose (Category 1)

5.3.1.1. Corporate Strategy Relationship

Interviewee 3 at organisation C captured the essence of what happened within their organisation and unfortunately what they slipped back into once the funding was cut:

"as far as strategy goes …. I don't really think we had one. I never saw it, never heard of it. We actually didn't do any strategic planning we did business and operational planning we didn't think strategically at all".

At organisation A they found that the BSC very clearly articulated their entire business direction and everything was referred back to their strategy. They saw and used the BSC as a performance management system in relation to strategy. So, it became the performance management framework for the entire system at organisation A, as they cascaded it down through the organisation.

Unfortunately, organisation C fell into the trap of using the term 'strategy' too much and ultimately the true meaning of strategy was lost within that organisation and strategy had only a minor link to the BSC, as their BSC was developed only as a compliance exercise. Whereas organisation A really understood the meaning of strategy and made their strategy the centre of the BSC and all their planning. including operational planning meetings and decisions.

5.3.1.1. Measurement versus Management

As mentioned in chapter 4, using the BSC as a strategic management system meant that the measures would be designed around strategic objectives, and initiatives, and the organisation would be monitoring and managing the extent to which their strategy was achieved. As can be seen in the following sections the approach by the top management to reporting and cascading reflected to the organisations were their emphasis was i.e. measurement or management. It appears that not all organisations were aware of which emphasis they were actually reflecting to their organisation.

The meeting and reporting processes was very strategic at organisation A. Organisation A decided on their major strategic initiatives, then they developed several smaller initiatives to help them achieve that major strategy. Each initiative had its own measure(s) and they were working on all of them all the time, so this was quite a critical success factor for organisation A. She saw the potential for it to be a performance management framework for strategy and operational business in the organisation

because once it was done correctly, they could monitor change in all parts of their business.

Interviewee 1 discussed that they had someone who took the minutes of the meeting and recorded the agreed actions and then basically those minutes were sent out and they became the new action plan. This action plan was a living document that they worked from so that people knew which actions they had to complete for the next meeting and follow up on. It also reported the discussions that had led to that decision, so that should there be any change within the executive team the new member would actually understand why those actions were being undertaken and why they may have differed from the original report.

Whereas in organisation C, she observed that the report that came in was read out and the actions were what the actions were, there was very little change to them or thought that went into that. They were not taking effective minutes of the meeting, the BSC had very little airtime. Even though she had allocated different measures to each executive to manage and report on. She was given one hour a week with the executives. So, it was about measurement not management within this organisation.

In organisation A the middle management had two months to develop their scorecards before cascading it to people at the next level down. They had six divisional scorecards and had started unit level scorecards. Organisation A received a commendation for their strategic planning framework and for their application in terms of engagement with the community and with their staff, so there was high recognition that it was business practice excellence. Whereas in organisation C, there was very little BSC cascading.

5.3.2. Design and Process (Category 2)

5.3.2.1. Accountability, Assigning KPI Ownership

In organisation C even though different measures had been allocated to each executive to manage and report on, the assigning of measures did not lead to ownership as they saw the whole project as a distraction from their real job. Whereas in organisation A the measures were not only assigned to different executives to report on, but the executive did take ownership of their measures. They saw this whole process as an

opportunity to promote their successes and to put forward any suggestions for change if their measures were not positive or heading in the desired direction.

5.3.2.2. Quadrant Balance & Evolution

The main issues discussed within this factor were: number and type of measures; reward system and Human Resource Management System.

In organisation A in their first round their measures were all quantitative but once they realised, they could use initiatives and qualitative measures instead, they did so. This lessen the burden of administration.

Interviewee 3 didn't seem to think this was a problem for organisation C. She thought that the measures were good for each of the indicators and they were able to refine some of the measures and the measures were a good indication of how they were going with their objectives. The measures were chosen by her and the core team with input from 'experts' in the subject field. Each objective had a sponsor person who with their team developed a process for how to develop a good measure for that particular objective.

She felt the BSC made developing a measure quite easy and it was really effective, and it had like a checklist at the end, to examine if the BSc measure was driving the intended behaviour. Once the measures were created; she then took it to the executive measurement team and then they took it to the broader middle management team. They spent the whole day workshopping with middle management as to whether they agreed that the suggested measure was the best measure for the objective and some measures were changed or refined at these meetings. She felt at this point they had some buy-in into the BSC because of this whole process. Once again reinforcing that they viewed the BSC only as a measurement system.

Both organisations struggled with employee measures, as there was no ability within their organisations to reward people numerically. Although organisation A come up with some create ways of supporting their staff, for example providing childcare onsite. Interviewee 1 noted that even if the staff were working really hard to help them get to their strategy, the staff were doing it for different reasons. They were not doing it for

money, they were usually the type of person who had a value system that lines up with what they were doing, they were doing it to give their best to their patients or their co-workers. Whereas organisation C were using more operational type measures like employee retention, but this measure did not capture the loss of experience versus employing less experienced replacement.

Interviewee 1 also noted that an issue in healthcare in the longer term is that they traditionally have weak performance management systems in the Human Resource context for personnel who generally were not performing at a level expected by the Human Resource process. One aspect in healthcare that caused some of the initial reluctance was concerning performance appraisal and development plans and tying strategy to the plans. After the BSC was developed, employees knew they needed to perform, and most staff were very supportive. Others who were scared of the performance development plan resigned from the organisation, which was seen as a positive for the organisation as a whole.

5.3.2.3. Data Quality & Information Flows

The critical information factors were not just about data quality, but included whether the data was reviewed, whether there was feedback and was that feedback acted upon.

As stated earlier, organisation A was constantly reviewing their measures and initiatives, at executive meetings, with members being assigned particular measures to be accountable for reporting on. Organisation A's Information Technology data collection was efficient and easy to understand; therefore, the information was communicated effectively throughout the organisation. Staff could go to the organisation A website where there was a summary page with a legend to indicate achievement levels of each of the measures.

Interviewee 3 (organisation C) did not think they were going to continue using reporting within the BSC framework. She thought they were just going to continue with the project plans that they had written but they did not continue with them as part of the BSC framework. She wanted a reporting database online that anyone can look at from

anywhere and just quickly fill in their data so they could get the reports easy, because after the first reporting no one handed in their reports.

Organisation A followed the recommendation from the consultants to provide feedback to their wider community, their staff and their partners on the outcome of each of their strategy meetings. There was a high degree of transparency in reporting back to people. There was a constant flow of information pertaining to what was happening with the scorecard to the internal stakeholders and external stakeholders of organisation A. That helped to keep stakeholders in the loop and helped them keep offering organisation A things to help them make it happen.

Interviewee 1 provided a copy of their BSC with red showing the iterations and the changes they had made from progressive versions of the scorecard in line with the feedback that had been received from the consultations and the stakeholders. If they had 75% or greater agreement on their objectives or the measures or the initiatives they were not changed, if it was less than that then the objectives or measures were reviewed by the executive team and a decision was made about how to change it in line with the comments that they had received. They utilized their feedback in a very formal way to guide the decision making. They could clearly say whether they had a majority agreement or not and some of that factual information helped them move past some of the very verbal detractors who were in fact from the minority. They had a clear system of accountability and employees had a high enough degree of trust in the process that it was factually correct.

Whereas at organisation C, when they actually got to doing reporting on the objectives and measures, Interviewee 3 noted that they would focus on a specific set of objectives and that would purely be because of the reporting period for those measures was due. So, organisation C only received reports on ad hoc measures at alternate times, because they had a schedule of when each measures would be reported on, which was not basis priority or any other criteria. Also, even when the reports were presented very little feedback went further than the executive team.

5.3.2.4. Stakeholder Management

Interviewee 1 declared that having the stakeholders engaged and early in the process, kept them engaged throughout the process and also the support of the executive leadership would have to be the most critical factors in terms of success or lack of success in implementing the BSC.

At the time when organisation A was developing their plan, they were part of a cluster of four other districts in their zone and not one of those districts (including organisation C) was willing to engage with external stakeholders because they were very unsure how their leadership team would be perceived outside with the external stakeholders. Whereas organisation A's team was very confident in their ability to interact and very confident in engaging with external people, so they were open to the idea and, in fact, supported it and as time went on, they became even more committed to the concept. They did not have a *'them and us'* attitude to the process of engagement and she thought that was very critical in terms of the BSC success factors.

At organisation A one of the most important factors in maintaining the scorecard and developing the scorecard was having a variety of external stakeholders engaged in the process, they drew on some of their key partners in the initial phases of developing the plan and into the BSC implementation. This engagement with all stakeholders was a key factor in ensuring that the plan was stuck to at the district level, because it was not just a plan that was developed by a certain group of executives. There was high recognition that the community had become engaged in developing that scorecard and to change it in any way would compromise perhaps their relationship with their stakeholders and their community. They had three changes of District Managers during the BSC development but because the consultation in the initial development stages had heavily involved those stakeholders there was a commitment by subsequent leadership teams to stay with the plan.

Organisation A who recognised the critical nature of these external relationships were all able to successfully implement and embedded the BSC with their particular organisations. This is a major contribution to practice and theory through the modification of the CSF Implementation Model (Model 2).

5.3.3. Contextual Integration (Category 3)

5.3.3.1. Healthcare Regulations

The healthcare regulations, standards, and guidelines were the same for both organisation A and C. So, both organisations were subjected to the same temptation to include all the required government measures into the BSC, rather than focussing on their strategic goals, but organisation A resisted the temptation. Both organisations were also impacted by a number of government reviews requiring additional reporting.

A number of government reviews came out during the time of the BSC adoption in organisation A, and funds from head office quickly switched from the BSC to be used to implement the recommendations of the enquiries instead. These recommendations were not necessarily strategic in nature or forward thinking or linked back to the BSC framework. Hence, organisation A chose to fund the BSC itself. These reviews also impacted organisation C and shifted their focus away from the BSC, on to other, in their view, more pressing issues and priorities.

The regulations concerning funding linkages were also an important issue within this factor. Interviewee 1 observed that unfortunately even though organisations did put up some business cases around their specific initiatives at the district level those were rolled up to a zonal (combination of several local districts) level initiative. Then the zonal management unit in turn rolled those business cases together and requested funding for the initiatives from head office. So even though initiatives were funded from the business cases that districts put forth they were funded on a head office wide basis, as such the funding did not always filter down to the district level initiative. There was a variable degree of communication about the outcome of what had happen with the business cases, so some districts including organisation C became very disenchanted and disengaged as a result of that. There was very little linkage between funding and initiatives in organisation C. Interviewee 3 stated that resources were limited, there was not enough resources within districts to sustain the BSC. So, funds were distributed to the ‘loudest, hardest voice’, not strategically at all.

5.3.4. Strategic Human Resource Management (Category 4)

5.3.4.1. Management Competences

Part of showing management competences, was in the level of internal consultation and training that they provided throughout the organisation. At organisation A, they delivered intensive information sessions, firstly to their executive and top-level doctors, then to the hospital employees generally, followed by open forums for the wider community stakeholders.

Interviewee 3 at organisation C thought that the timelines for consultation with staff was too tight, they did not anticipate that the consultation needed to be so full. The districts needed to consult with a whole pile of organisations external to their organisation; they had to deal with other government departments. They also had to making sure that the internal staff knew what the organisation was planning on doing with the BSC development and make them feel part of the process. A month is just not long enough for this process.

Interviewee 3 stated that the whole training that they received could have been more valuable if communicated in a different way . In their organisation the training was supposed to happen before they did any consultation, but it happened after some consultation. They needed to do training first then some consultation and communication of what was happening. The timelines were so short, and she thought that everyone everywhere was stressed out during those first couple of months about how much time they were given to do the consultations. Hence, the consultation process was rushed at organisation C, and not as effective as it could and should have been. Also as noted earlier the Champion received very minimal training and was given guidance the wrong way at times, but she did set about educating herself, showing true grit as a champion.

5.3.4.2. Organisational Learning

Organisation A was educated so that they understood the relative advantages and need for a new system. The BSC was ‘sold’ to the managers and the organisational members and external community alike. Once the BSC is in place the impact was constantly understood, monitored, reviewed, and communicated by the managers and internal

stakeholders involved. An open culture of feedback and internal stakeholder involvement helped to facilitate this type of learning in organisation A.

The problem here is that if the organisation does not learn from past mistakes, failures, poor systems, then they are more susceptible to falling into the same traps as previously experienced. As did organisation C. They seemed to suffer from this lack of organisational learning. They were just trying to take a 'compliance exercise' approach.

5.3.4.3. Cultural Acceptance

Two of the major issues in achieving cultural acceptance was the need to sell the BSC, to get buy-in and how to manage divisional (silo) groups.

Interviewee 1 as project officer at organisation A found it easy to sell the concept to their executives. Because of the District Manager, and the executive had already bought into the concept when she got there so she had to sell it to the staff and their partners and external stakeholders. So, they knew what was going to happen, and ask for their help. She thought this was another critical success factor.

Interviewee 1 observed that in the early stages how the concept was sold was not given enough credit. One of the very first presentations that she gave to people was an overview of the demographics of the district and some of the drivers for change. 'So why are we even undertaking this?' The District Manager was very clear that this was going to be a successful venture and he got the executives on board and would not tolerate anyone who detracted from the process.

At organisation A they had a few key influential doctors that were on board right from day one so they were actually able to organise getting all the doctors together for a discussion about it and how it was going to work so that worked well for them, having the key doctors buying in. Their allied health practitioner also came on board, because of the way the BSC was explained, communicated and the level of participation into the process that they were all given.

At organisation C, different groups had very different levels of buy-in and support for the BSC. The doctors seem to be the hardest to sell to. The replacement District Manager was a top doctor and hence held sway with the other doctors, telling them that it was an impost on their day to day duties and was just adding to their workload. She got some buy-in from the allied health practitioners but found it very difficult to cascade it downwards as she was given little time to consult and engage with the broader organisational community to gain their input or understanding. This was a major difference between organisation A and C, making it difficult to implement in organisation C.

Table 5.4 summarises the findings as they relate to the CSF model (RQ3a).

Table 5.4 Summary of CSF Implementation Factors.

Implementation Factors	Organisation A	Organisation C
Corporate Strategy Relat[n]	Fundamentally reflected strategy	Fringe link only, seen as a compliance exercise
Measure vs manage	Measured & Managed	Measurement System
Cascading	Whole organisation	Little at first, then none
Accountability	Assigned & Owned	Assigned but not owned
Quadrant balance	Got better at this throughout the process	Good spread of measures but no evolution
Employee measures	No reward system to link to	Measures that didn't really capture what they wanted
HR System	Extensive use of PDP	Little change, old HR system
Data quality/Information flows	Very good & ongoing	Top level only, information did not flow far
Reviewed data & Feedback	Communicated to everyone on a regular, ongoing basis	Ad hoc, very little reflection
Stakeholders	Excellent management of both internal & external	Internal – little involvement External – minimal consult.
Healthcare Regulation	Integrated with the BSC strategy	The reviews changed their focus away from BSC strategy
Link to funding	Their initiatives become business cases for corporate	Funding was used elsewhere
Organisation Learning	Huge & Ongoing	Little learning from the past
Cultural Acceptance	Huge buy-in from top - bottom Explained, communicated & participation encouraged	Partial buy-in, too many distractors, and divisional silos
Division (silos)	Bridged the gap between the divisional silos	Couldn't bring the DRs in, Allied health partial buy-in
Management Competence	Extremely good, skilled, with healthy people relationships	Different level of managerial & people skills within the team
Barrier Management	Very effective	Poorly handled

5.3.4.4. Barrier Management

Each of the issues identified below will need to be managed wisely by the management and organisation to enhance their chances of having a successful implementation of the BSC. The most raised issues in this area by the interviewees were: top down approach; use of jargon; number and type of measures chosen; degree of openness to sharing and new ideas; limited timelines; time consuming process, limited resources and funding.

5.4. *Barriers (RQ3b)*

5.4.1. Top Down Approach

Organisation A was very good at making sure this process was not viewed as a top down approach, and that everyone on all levels of the organisation, including cleaners could voice their ideas and be heard. Organisation C very much saw this whole BSC project as driven by head office and therefore a top-down approach rather than owned by them and developed for them, which therefore led to a lack of input from down the ranks.

5.4.2. Jargon

Interviewee 1 (organisation A) discussed that the most important thing was not to use any jargon, to give people an understanding of the drivers and to explain the BSC, she simplified the language very early. She told them 'internal process is about service delivery'. There was a very large scale presentation given by head office staff to get people engaged; which happened after her initial presentations to a large number of stakeholders where she had been using quite simple language and been providing a very clear picture of why they were undertaking this exercise. The presentation by head office utilized the BSC language in its purest form. They were asked to not use that jargon again because it alienated people and they could not understand what the presentation was about. Interviewee 3 (organisation C) found it difficult to get away from the jargon and felt that the participants did not fully understand the jargon.

5.4.3. Too many measures/Quantitative measures

As mentioned earlier organisation A struggled with too many quantitative measures, but very quickly solved this problem. Organisation C thought they had done a great job

of choosing measures, but never did any feedback to establish whether they were actually achieving what they thought they were.

5.4.4. Degree of openness

Interviewee 1 observed that in organisation A, the executive team were very much involved in understanding the report and leading discussions around it versus other organisations who delegated out and brought it back to the meeting and basically read off the reports and the proposed actions. So, the functioning of the teams was an important factor, as was the degree of openness.

At organisation C the interviewee noted that in her organisation that there was not a culture of allowing people to openly put forth their ideas that may have been out of keeping with perhaps some other peoples' viewpoints and they could not necessarily have open discussion and debate about the best course of action.

5.4.5. Limited timeline

In organisation A they only had six weeks in the planning process between when the project officer was appointed and when the end of the first consultations was to have been completed and the first workshop was going to happen. So, in six weeks she interviewed over 400 people and put together a decent collation of their ideas.

At organisation C, the interviewee felt that once she had left that they would not continue to report. Because of insufficient time and resources, they probably would hold out reporting to try and get extra human resources or because their focus was now on competing priorities in terms of accreditation.

5.4.6. Time consuming

Interviewee 1 observed that to start with all their measures were quantitative, and they thought they needed a separate measure for each, so the burden of administration built up over time because they were actually reporting against measures and then they were reporting against initiatives on top of that. Organisation C saw it as a time-consuming exercise that took them away from the main day to day business issues. They remained short-term focussed.

5.4.7. Limited resources

Interviewee 1 observed that in other organisations in her district, as soon as the project staff left, a lot of them did not report again after that because they either had insufficient resources and in some cases they were probably holding out reporting so that they could be given extra human resources or they just had insufficient time and there was competing priorities in terms of accreditation. Organisation C did not see the need to place additional resources into the BSC once head office funding diminished.

5.4.8. System and process breakdown

Even though there was a breakdown from head office of direction and funding around the BSC, organisation A was determined to drive it forward, as in their view they had already reaped great rewards and strategic advantage. Whereas in organisation C, the process broke down when the new Government quality framework was released and attention and resources were diverted to the new immediate need, rather than being integrated as part of the BSC strategy plan.

Table 5.5 Summary of Barriers to BSC Adoption

Barriers	Organisation A	Organisation C
Top Down process	They engaged all stakeholders, owned from the bottom up	Top down, therefore, no ownership further down
Jargon	Avoided, used everyday language	Their people got lost in the jargon
Choice of measures	Quantitative vs Qualitative measures, changed b/c monitored	Claimed good measures, but no feedback to confirm this
Openness	Excellent	Closed/secret, new ideas were stifled
Limited timelines	Managed well	Didn't cope with minimal consultation
Time consuming	To start with, but with organisational learning they managed this better	Thought it was too time consuming so did minimal – compliance only
Limited resources	Ongoing internal funding	No resources given once corporate stopped funding

As can be seen from the above discussion, there are some stark differences between each of the factors identified between the two organisations that were studied in depth.

These factors have been summarised in Table 5.7 pp 230-232. Of interest is that not only did these factors affect the successful embeddedness of the BSC in organisation A and unsuccessful attempt in organisation C. These factors also lead to different behavioural, organisational, and political impacts within these organisations. Hence within the next section the difference between the implementation being a change process vs a compliance exercise will be discussed. Followed by a section discussing the resultant differences in roles performed by the BSC within organisation A (change process) and organisation C (compliance exercise) as a consequence of their implementation process and the observed outcomes/impacts of such implementation.

5.5. *Change Process vs Compliance Exercise*

Organisation A started off implementing their initiatives straight away. Their initiatives were their drivers of change and people saw that the plan was being used and that there were some outcomes from the plan, and it kept them engaged with their partners.

Straight after they had done the BSC, she pulled out an issue that people had repeated brought up in the survey in the consultation phase and ran their first electronic survey which was the precursor to running their staff satisfaction survey. They sent out a survey on e-mail, where people clicked on the results and it automatically collated back to a spreadsheet. People voted for the type of milk that they wanted the district to have. They got over 60% of the staff to reply, that was the highest response rate that they ever had to a survey. It set the scene because the change was implemented immediately from that survey and so therefore people engaged straight up, they knew that if they were going to participate there would be an outcome. So, when they ran the staff satisfaction survey, they also got one of the highest responses results they had ever had. She thought that was very important, as well as looking at making sure they actioned things very quickly.

In organisation C, they always saw the BSC as just another head office directive, that they had to do, rather than seeing the potential for change.

The above discussion raised the issue in the researcher's mind, as a consequence of the existence or not of different adoption factors within each of these organisations (A

& C), was the BSC seen to perform different roles within each of these organisations and as a consequence was there different outcomes. Hence the next section will discuss the roles the BSC performed in each of the case studies.

5.6. *Roles/Outcomes of the BSC (RQ4)*

The roles identified and examined were organisational performance measurement, manager's performance measurement, communication tool, resource allocation and/or co-ordination, planning and forecasting, motivational tool, incentive schemes, political role, attention directing, change mechanism and strategy implementation. These roles will be discussed in sections 5.6.1 to 5.6.12.

5.6.1. Performance Measurement

Interviewee 1 believed at organisation A that the BSC impact on the performance measurement was large. She said this because of the high degree of change that was evident within the district, not only in terms of consumer outcomes, but also in changes of behaviour at the executive level in the way that they held their meetings and the way that they modelled their behaviour, in the way that people were communicating with each other. The performance of the district as a whole shifted forward towards the future and what they needed to do. They had demonstrable outcomes and impacts from implementing the BSC and they will openly acknowledge that in the executive.

Interviewee 3 felt the BSC had no impact on the department performance management. They were talking of cascading down into units/divisions at the time this interview was conducted, apparently some units did actually develop measures. But that stopped as soon as corporate funding for the Champion and the project stopped.

5.6.2. Manager's Performance Measurement

In terms of manager's performance measurement, interviewee 1 thought the impact was also pretty large, but in terms of middle management probably medium, because as the cascaded effect went down there was slightly less understanding of the methodology even though there'd been extensive training sessions etc. As they were more

operationally focussed their relationship to strategy was slightly diminished. They were just starting to do all their performance appraisal and development plans.

Interviewee 3 (organisation C) felt that it had only had a medium/small impact on Manager's performance measurement even though it was one of their initiatives.

5.6.3. Communication

As a communication tool interviewee 1 (organisation A) thought it had a large impact. But only because it was marketed correctly and in multiple ways. Her organisation had done face to face sessions and newsletters where they talked about their outcomes that had come from their initiatives and implementing those initiatives. They were multi-faceted in your communication approach and also explaining the BSC. She ran big session where she verbally sold the BSC and then she tied that to examples of things that had been done. So, for them it was a very effective communication tool.

In organisation C the interviewee also felt that as a communication tool the BSC had, had a large impact, purely because the strategy map basically let everyone in the whole district know where we were going. It was a fantastic tool to be able to illustrate rather than just say, "This is what we're trying to do". The strategy map made it nice and simple for people and showed the cause and effects. But this is only one aspect of communication, so the researcher felt large was probably a little generous, in the full sense of what the study was trying to capture with the communication construct.

5.6.4. Resource Allocation/Coordination

Interviewee 1 felt this was medium to large in her organisation (A). She noted that because not all the resources came from their organisation for the BSC they had to coordinate resources from other people to help them. As a district they let go of some things internally to fund her to be in the position and to fund the initiatives. When it came to budget allocation time, they looked at what was on the BSC, and then had to prioritise these versus what each division had suggested, that were more operational in focus. They talked about the strategic initiatives and how to fund those first, then they talked about the operational ones as to priorities of each strategic initiative.

So, they could only maybe fund two of those this year and they would focus on others next year. They decided on four divisional specific initiatives as well as two district-wide strategy ones, so they actually had a plan of what and how they wanted to attack their business overall. By the time they got to budget cycle and it was only a matter of assigning the dollars to make the initiatives work. They tried a business case with head office, nothing came out of that, then they got together with their partners and then things started to really happen. She stated medium to large because it was an iterative process of them learning how to allocate their resources to make their strategy happen.

The BSC at organisation C only had a minor impact on resource allocation and co-ordination, but she believed it had the potential to have a greater impact in the future.

5.6.5. Planning and Forecasting

Interviewee 1 (organisation A) thought it was large. It was a clear framework, and they had a clear vision of where they were moving to and how they were going to tackle that. In organisation C there was not a lot of planning and forecasting that occurred prior to the BSC. Hence the BSC had a large impact on planning and forecasting. She felt they were thinking miles ahead after the BSC was introduced. But it was not strategic planning, just operational planning.

5.6.6. Motivation

Interviewee 1 thought it had a large impact on motivation in organisation A. She talked extensively about the commitment within the executives and people outside of their organisation, their external stakeholders were partners in helping them to achieve their vision. She believed this was because from the start people understood where we were going so their motivation was large.

Interviewee 3 felt that there was only a somewhat impact on motivation in organisation C and that it varied between groups. Some people were highly motivated saying, "*Awesome! Let's do this*,", others were like, *"more work"* so the impact varied.

5.6.7. Incentive Schemes

Interviewee 1 was not sure how to rate this one, because in their organisation there was no ability to pay bonuses. They found other incentives for people to participate in and that was by looking at their consumer outcomes and looking at their own personal incentives for staff as a whole. Non-monetary incentives, for example, stocking the milk they liked, on site gym equipment, and better lunch facilities were provided. In organisation C, the impact of Incentive schemes was none. They talked about having some awards scheme but that never ended up happening.

5.6.8. Political Role

At organisation A, interviewee 1 said somewhat because there were election promises given that impacted at a local level that were not necessarily in sync with their organisational strategic planning process.

At organisation C, interviewee 3 felt the impact was medium. They did decide to shut down birthing at one of the rural hospitals under their jurisdiction, as the maternity area there did not have enough doctors. And they did not foresee getting more doctors to go out there. Someone leaked this information and hence they we were in the papers everywhere. The birthing decision was not because of the BSC, but we knew that whatever we did we had to be thinking politically minded. If anything was going to look negative out there, it would not be included on the BSC at all, they wanted to be seen in a positive light in the general public.

5.6.9. Attention Directing

Interviewee 1 thought it was high (large) at organisation A, because their strategy, measures and initiatives were all captured in one place and there was regular discussion around those issues that they were working on and it was not just the issues on the BSC, it was the issues that were also brought out in the consultation that informed the development of the BSC. So, whenever they were talking about a particular objective in the backs of the executive mind were the consultation discussions that had led them to develop that objective and the sorts of things they needed to be working on and overcoming to get to their objectives.

Interviewee 3 felt that the impact on Attention directing in organisation C was only somewhat. Not surprising given they saw it as a measurement and compliance exercise, not as a strategic exercise to point their attention towards their goals.

5.6.10. Change Mechanism

As a change mechanism in organisation A the role was large because of the outcomes that they observed and the changes in the attitude of their staff at different levels of the organisation. At organisation C, interviewee 3 also felt that the BSC as a change mechanism had a large impact. It did bring about changes, but not strategic ones.

5.6.11. Strategy

In terms of strategy, interviewee 1 choose medium to large because they were just starting to see the major effects in only twelve months and with more time, she thought it would have an even larger effect on organisation A. It had a cumulative effect she believed. She saw an interplay between the roles that the BSC played within her organisation, particularly between communication, change mechanism and motivation.

Interviewee 3 felt as far as strategy goes, its impact was large because they did not really have a strategy before. They did not do any strategic planning they did business and operational planning. And their business planning, was not thought about in a strategic way at all.

Table 5.6 summaries the major findings between organisation A and C concerning the roles performed by the BSC within each organisation and highlights the outcome in terms of each organisation to embed the BSC into their everyday business. These findings have contributed to both the knowledge that practitioners can utilise within their own organisations and to BSC Adoption and CSF theory, because they illustrate that there is a strong connection between the roles performed by the BSC within an organisation and the successful implementation and the outcomes achieved.

Future studies could examine how many of these roles are necessary to achieve successful embeddedness and positive outcomes.

The major findings about the BSC roles are summarised in Table 5.6.

Table 5.6 Summary of BSC Roles and Outcomes

Roles/Outcomes	Organisation A	Organisation C
Performance Measurement	Large impact with demonstratable outcomes	Little impact, some developed measures
Manager's Perf. Meas.	Large impact, own PDP	Small/medium impact, even though it was an initiative
Communication	Large and effective impact	Large impact on understanding the BSC, but limited after that
Resource Allocation	Large/Medium impact, but still growing	Minor, but perceived as having potential but didn't happen
Planning/Forecasting	Large, clear vision	Large operationally, but not strategically
Motivation	Large	Varied across the silos
Incentives	Non-monetary	None
Politics	Somewhat	Medium, were very wary of the press
Attention Directing	Large, kept them focussed	Somewhat
Strategy	Medium/large but still growing in impact	Large, hadn't thought about strategy before, but this didn't last long
Change Mechanism	Large/Massive impact	Viewed as Large change within the organisation, but was not implemented as a change agenda
Embedded	**Yes, successfully**	**No, fell at the first hurdle**

5.6.12. Positive Outcomes & Results

Within organisation A the outcomes were very obvious and extremely positive. They were able to engage with their external stakeholders on a level that advanced the care of their clients beyond the levels being achieved before the BSC, because of accepted common strategies and clearer lines of communication and maximisation of synergies.

The levels of satisfaction of both their clients/patients and their employees increased significantly. The whole organisation was onboard (they had very few dissenters, who very quickly moved on) and understood the roles of the BSC and their part within the organisational BSC itself. They received positive feedback in the local newspaper and also received an award as state-wide recognition for their successful outcomes. They

were able to dis-invest of some of their unutilised assets and utilise the funds to create new more focussed facilities.

Even what appeared to be less significant issues, when discussed and decided upon as a group lead to positive staff satisfaction. For example, the milk survey mentioned earlier. They knew that they could only supply one type, that was very clearly stated, for the staff but they wanted the majority of staff to vote whether they had full cream, trim or skim milk, they got over 60% of the staff to reply. That set the scene and because the change was implemented immediately, people knew that if they participated, there would be an outcome. So, when they ran the staff satisfaction survey, they got one of the highest response rates ever.

They ended up getting public transport to stop out the front of the hospital which is what their staff had brought up as well as their external stakeholders and consumers when they interviewed them. They wanted the bus to stop out the front of the hospital, not on the main road and so they worked on the initiative with the council to make it happen. They also had a number of other smaller and larger changes for different groups some of them have been widely recognized by staff, some by consumers and external stakeholders. The consumers were greatly impacted by 'the chronic disease strategy' and it also had a bit of an impact on the staff as well. They drove this strategy in terms of access (parking, public transport) and not having so many different services, asking consumers to go to the same program.

Their staff also responded well to the initiative re planning processes around them and not just around professional development but also about goals for their workforce and actually achieving change beyond the traditional things for the workforce themselves.

In terms of Projects, in organisation A, a decision was made not to rely on head office funding for the implementation of their plans. They used disinvestment to help them bring their plans into action. They consolidated some separate programmes that had been running for chronic diseases and engaged with their partners to see how those programmes could be run in true partnership. For example, they had four different

programmes running by four different practitioners in the organisation, all of them being run in the hospital which had notoriously bad public transport access. There was also increasing competition for space and rooms within organisation A and other programmes were being run out in the community by their partners.

So, they managed to get funding through the public health unit to do a mapping exercise to map every activity and programme that was being undertaken in their geographical area to find out where the areas of duplication and the gaps were in service delivery around chronic disease and then they started to use that information to work with their partners. Then they agreed on a model to be run for their district and their consumers rather than both organisations carrying out administrative tasks and taking referrals etc., now they worked together and divided up the workload.

They started running programmes on their partners grounds which had better access to public transport. Their partners ran the administrative aspects of the program, which meant that they would take all of the referrals and the bookings from the practitioners. Organisation A would then provide some health professional expertise for certain lectures and they would provide the lay leaders and train them for other areas too. So, they ended up with an excellent programme for their consumers.

Also, on their site alone they saved in excess of 500 hours a year which was then freed up for other groups and the conference rooms were freed up for their own staff to utilise. They also realised significant savings in administrative costs and could better utilize their health professionals with expertise by taking them away from doing all of those administrative duties and allowing them to specialize in areas such as case management of consumers with complex care needs. So, by working in partnership they managed to bring things into fruition that other organisations had not. They achieved this by thinking outside of the square and not waiting for outside funding.

Organisation A developed both initiatives and business cases. The initiatives were programs, projects or activities that were identified in their BSC as having a whole of district impact, to create change within the district. For example, they did a review of

existing staff satisfaction tools and developed an agreed tool for the district and then run the staff satisfaction survey and then implement the results. They used the results to spur further initiatives and actions from. Staff then knew that if they were running a survey that something would be done and hence, they filled them in.

The business cases were a piece of documentation that was drafted, to request some resources to make those initiatives happen. They sent a business case to head office around Telly Health. Telly Health was an initiative where they wanted to use technology for their clients that were in the islands or in quite remote areas of their district. They wanted to be able to use a type of video conferencing to link them up with the larger hospitals for services that their hospital did not provide and also to link their customers to their hospital so that they didn't have to travel so much, thereby improving their 'access' to healthcare services.

They put up a business case requesting funding to purchase that equipment and also to lease some space in the local GP's consulting rooms on the island. So, it was a nice secure place where people were comfortable going to receive health care treatment, and they could also go into those rooms and just hook up to health care professionals in remote locations. These business cases were rolled up into larger initiatives at the zonal level then rolled up again to head office for funding.

Because their greatest challenge in the future would be managing chronic disease effectively and addressing the burden of disease which was growing exponentially in Australia because of lifestyle factors. Investing in health promotion and prevention in the longer term was likely to bring them gains. So, they were experimenting with innovative models for delivering that kind of care. They let people know that they were going to invest in preventative health care and health promotion service delivery, which was a shift of paradigm at the time.

On the other hand, organisation C, continued to have dissenters, unhappy employees and clients and dropped the BSC very quickly once it was not funded by the head office. They were plagued with bad press at the time and miss out on the opportunity to use the BSC to turn their reputation around. But it did however leave them with a useful

measurement tool. And did achieve some level of strategic type discussion when they had planning meetings, although the operational discussion always outweighed strategy in terms of time and funding. Unfortunately, a great opportunity lost.

Although on a positive note, organisation C through the BSC project ended up asking *"How many reports are we doing and why are we actually doing those reports?"* They were able to cut out some of the reporting and found that they did not actually need one whole person in the area of coding of the charts where they had been months behind on, and now they could get their coding done on time. They did not save any money, but they were able to realign resources to other areas where they needed it. But the cutting of jobs, was not handled well and had a negative impact.

At the first reporting in organisation C no one handed their reports in, they were not measuring, or managing their measures. So, they decide they needed to develop another system to help them with reporting, it became about developing more and more systems. Hence when they started measuring how many patients were actually filling in the forms and found out that in one of their division's ten percent were completing and in another division ninety nine percent were completing. By making both divisions report on form completions they were able to get cash back from the private sector. Because once they were filling in the forms, more patients elected to be private patients in the public system. Then they got to choose their doctor which is a public doctor anyway but then the organisation could recoup cash back from the private insurance company. So, they picked up a few areas where processes and procedures were not being followed and so the BSC did have a positive impact in those areas. Although most staff were just complaining about having to do more work as far as collecting data for measures was concerned.

So, as can been seen from the above discussion, organisation A achieved extensive outcomes from their CSF change oriented implementation process compared to organisation C. Organisation C only viewed the task as a add on compliance exercise and ultimately the BSC was dropped in that organisation.

5.7. *Summary*

As can be seen from the tables below and the discussion above there is quite a contrast between the two organisations in terms of the BSC Adoption factors, the organisational culture and the Critical Success Factors of implementation of the BSC and as a consequence the organisational outcomes.

As outlined in Chapter 6 these findings have contributed to both practitioners' knowledge and to the Diffusion of Innovation, BSC Adoption and Implementation, and Management Control Systems theories and literature. It has also allowed the researcher to develop model 1 the Factors that affect the adoption of the BSC and to modify Rodgers 2011 model to enhance the understanding of Critical Success Factors for implementation of Innovations like the BSC within Healthcare organisations. The findings have also contributed to the knowledge around the culture and organisational characteristics that impact on the implementation process of systems like the BSC.

Table 5.7 on pages 230-232 outlines a summary of the major findings from the case studies in relation to BSC Adoption factors, organisation characteristics effects on the BSC and the critical success factors of BSC implementation within organisations A and C.

Table 5.7 Summary of BSC Adoption factors, Organisation Characteristics & CSF.

Adoption Factor	Organisation A	Organisation C
Champion	Driven	Driven
	Educated at the start	Self-educated after ill-informed
	Knew the process	Tried to learn on the job
	Huge communication	Told not to communicate – Exe.
	Strategic change	Compliance
	Executive level appointment	Lower level appointment
Top Manag. Support	Total support & encouragement by DM & Executive	Divided support: DM yes, Executive - mixed
	Viewed as permanent change	"fad & fashion" philosophy
	Engaged positively with the method	Hoped it would go away
	Openness & sharing	Divisional/Distractors
	Executive took ownership, reported, analysed & discussed	No ownership, brief reports then reverted to operational
	Led by example, with own PDP	Disruptive, shut down while DM away @ critical measures stage
	Total acceptance of the BSC	Lot of convincing with minimal support
Consultants	Useful at beginning, used for review at end, not part of the process	Useful at beginning, used to review at end, not part of process
Size/Complexity	Positive impact due to stakeholder's engagement in the process/priorities	Too many measures because stakeholders wanted own priorities no combined strategy
Compatibility	Values- very good	At odds with traditional values
	Co-operation	Not even internal co-op.
	Became long-term focussed	Maintained short-term focus
	Made strategic business plans	Operational plans ruled
	BSC became day to day business	Operations still day to day busi.
	Took it on as their own project because saw the advantages	Cynicism ruled
QMF	Integrated	Ran two QMF systems
IT	Needed training	Well developed
	Came to compromise on best medium to report in – Excel vs word	Integrated, single report produced by the system
	Learned to use, simplified reports	Easy to use
Relative Advantages	Regularly verbalised	Little evidence shown
	Demonstrated examples were provided	General agreeance that it should have provided advantages
Internal Divisions	Barriers were broken down	Definite Silos & resistance to work together
Mandated	Accepted as theirs	Resistance/ rejection
	Communication that reinforced the need for them to have the BSC	No clear direction, and lack of communication
Politics	Managed & Positive outcomes	Destructive inside & negative press
Aging Population & workforce shortage	Acknowledged & planned for Workforce strategies in place	Ignored, just rhetoric, just solving immediate fires (shortages)

Implementation Factor	Organisation A	Organisation C
Corporate Strategy Relat^{n}	Fundamentally reflected strategy	Fringe link only, seen as a compliance exercise
Measure vs manage	Measured & Managed	Measurement System
Cascading	Whole organisation	Little at first, then none
Accountability	Assigned & Owned	Assigned but not owned
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Employee measures	No reward system to link to	Measures that didn't really capture what they wanted
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Reviewed data & Feedback	Communicated to everyone on a regular, ongoing basis	Ad hoc, very little reflection
Stakeholders	Excellent management of both internal & external	Internal – little involvement External – minimal consult.
Healthcare Regulation	Integrated with the BSC strategy	The reviews changed their focus away from BSC strategy
Link to funding	Their initiatives become business cases for corporate	Funding was used elsewhere
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Cultural Acceptance	Huge buy-in from top - bottom Explained, communicated & participation encouraged	Partial buy-in, too many distractors, and divisional silos
Division (silos)	Bridged the gap between the divisional silos	Couldn't bring the DRs in, Allied health partial buy-in
Management Competence	Extremely good, skilled, with healthy people relationships	Different level of managerial & people skills within the team
Barrier Management	Very effective	Poorly handled

Barriers	Organisation A	Organisation C
Top Down process	They engaged all stakeholders, owned from the bottom up	Top down, therefore, no ownership further down
Jargon	Avoided, used everyday language	Their people got lost in the jargon
Choice of measures	Quantitative vs Qualitative measures, changed b/c monitored	Claimed good measures, but no feedback to confirm this
Openness	Excellent	Closed/secret, new ideas were stifled
Limited timelines	Managed well	Didn't cope with minimal consultation
Time consuming	To start with, but with organisational learning they managed this better	Thought it was too time consuming so did minimal – compliance only
Limited resources	Ongoing internal funding	No resources given once corporate stopped funding

Roles/Outcomes	Organisation A	Organisation C
Performance Measurement	Large impact with demonstratable outcomes	Little impact, some developed measures
Manager's Perf. Meas.	Large impact, own PDP	Small/medium impact, even though it was an initiative
Communication	Large and effective impact	Large impact on understanding the BSC, but limited after that
Resource Allocation	Large/Medium impact, but still growing	Minor, but perceived as having potential but didn't happen
Planning/Forecasting	Large, clear vision	Large operationally, but not strategically
Motivation	Large	Varied across the silos
Incentives	Non-monetary	None
Politics	Somewhat	Medium, were very wary of the press
Attention Directing	Large, kept them focussed	Somewhat
Strategy	Medium/large but still growing in impact	Large, hadn't thought about strategy before, but this didn't last long
Change Mechanism	Large/Massive impact	Viewed as Large change within the organisation, but was not implemented as a change agenda
Embedded	**Yes, successfully**	**No, fell at the first hurdle**

Chapter 5 has discussed the findings for Research Question 1 to 4 for the two case studies, by contrasting the similarities and differences between the organisations that have led to the different success and outcomes for these organisations. In the next chapter, chapter 6 we will discuss the major findings of this research, the limitations of this research, the contribution to both practice and theory of this research and potential future research.

CHAPTER 6 - CONCLUSION

6.1. Summary of Findings

In chapter 2 (refer p 26) a conceptual framework was established to allow the examination of the four research questions contained within this research thesis.

Stage 1 of the framework was to establish the reasons for adoption of the BSC. As nine of the organisations had the BSC mandated for their organisation the reasons for the BSC adoption was not always clearly communicated. For the other organisations the decision was both because the BSC was considered superior to the performance measurement and management system they had in place already and for legitimise reasons, to be considered up to date in the healthcare sector.

Within this stage was the issue of establishing the construct under examination. The difficulty of defining the BSC as a construct was not a problem for this study. As each of the interviewees were asked about what they understood the BSC to be, their answers showed that they had all been trained by the BSC Collaborative to have the same definitional meaning and understanding. Hence the findings were written from the perspective of an accepted understanding of the term 'BSC'.

Stage 2 of the framework established the two models developed from the literature research, that is, the BSC Adoption Model and the Critical Success Factor Model for implementation. In the BSC Adoption Model, the three organisational support factors of Top Management Support, a Champion and Consultants all had a differing effect on the extent of BSC adoption. Top Management Support was identified as having a large impact both for adoption and implementation. Although there was evidence to suggest that as long as the 'owners' of each of the performance measures were supportive, a change of District Manager (e.g. organisation A) or some top management resistance (e.g. organisation D) could be overcome and a successful implementation of the BSC could still be achieved.

By far the role of the Champion, and their managerial competence and the process of implementation that they used had the biggest impact on BSC adoption and embeddedness. The Champion was pivotal at each stage, and it was thought that they needed to be there permanently to ensure the ongoing success and embeddedness of the BSC and the resultant outcomes to materialise.

Consultants did not appear to have the level of impact anticipated in the projects. They did sell the relative advantages of the BSC to the head organisation and educate the champions, within the pivot organisations, around the use of the BSC and providing advice around ways to implement the BSC but had a minimal impact or involvement in the process of implementation within most of the other organisations. This was reinforced by consultants not appearing as a factor in the critical success factor model.

Organisational size and diversity seemed to have different impacts within different organisations. Within the successful organisation the size issues were overcome as part of the adoption processes employed by the Champion. That is, if the champion pro-actively and effectively managed the full range of organisational critical success factors identified, the organisations then improved their organizational performance through the BSC, in spite of their size, complexity or diversity.

The issues around size and complexity of structure were discussed by all interviewees. Some thought it had a negative impact and made it extremely difficult, while others saw that the biggest gains could be made in the larger organisations, as they had the resources and could capitalise on the synergies of departments working together for a common strategy. Although organisation H tried to deal with their complexities by using complex measures, this created problems for the BSC implementation and made it too difficult even for the top managers to understand.

Complexity and diversity had mixed impacts similar to those identified with the size of an organisation. The theory suggested that the more complex and diverse the organisation the more likely relative advantages can be achieved and because resources

are available this factor was expected to impact positively toward BSC adoption. But the complexity and diversity allowed for the divisional silos to make the process difficult, as each area wanted to only see their measures on the BSC and found it hard to come to a common consensus on what measure should be included initially.

In terms of the technological factors, Information Technology Quality, is deserving of more research as different aspects of Information Technology had an impact on BSC adoption within this study. Not only was the Information Technology quality important, but so was the Information Technology understandability and usability. This is definitely an area for further research as the understandability and usability did have an observable impact on the success of the BSC implementation and the effectiveness of its reporting and decision-making processes.

Having a Quality Management Framework in place did not impact adoption as originally expected. It appeared to have a negative impact, as organisations already had to follow and report on so many Department of Health policies and guidelines. Then a 'Review' demanded certain quality measures be mandatorily reported on, and personnel with some organisations did not want to have to report on the same data twice.

It was difficult to truly capture the relative advantage factors because this BSC implementation process was mandated for most of the organisations studied. As a consequence of this mandating the organisations did not always clearly see the relative advantages and need for the BSC, therefore making it hard for the Champions to handle the 'buy-in' and 'divisional' issues. The Champions who made a concerted effort to start by clearly communicating the need and relative advantages of the BSC had the most successful implementation of the BSC.

In term of information technology compatibility, this factor had a large mainly negative impact on the successful implementation of the BSC, especially in the areas of compatibility of existing cultural values, and past experience of the organisations. Compatibility with culture was a real issue in the organisations studied, all of the

organisations struggled with the inbuilt belief structures within their organisations and healthcare generally: i.e. traditional focus on finances; impost in day to day business; and culture of cynicism, old school views and territorial. Only those organisations that were able to change these inbuilt views to 'culture acceptance' were able to successful embed the BSC.

Hence as the conceptual framework shows, stage 3, organisational characteristics and culture also had an impact on the effectiveness of each of the factors identified in the two models and therefore on the success of the implementation and the outcomes of implementing the BSC in their organisations.

As shown in the conceptual framework, the BSC adoption Model needed to be supported by a CSF implementation process to achieve embeddedness of the BSC within an organisation. Hence a second model was proposed outlining the critical success factors split into four categories that impacted the successful implementation of the BSC within healthcare organisations. The impact of the characteristics of the organisation itself and the healthcare sector were also extremely important as a mediating agent as discussed above and throughout the critical success factors model below, especially in terms of the 'cultural acceptance' factor of the model.

As mentioned earlier the Critical Success Factor Model contains four overall categories strategic purpose, design and process, contextual integration and strategic human resource management.

The strategic purpose category contained two main factors: corporate strategy relationship and the principle of measurement versus management. For a BSC to be successful, it must clearly relate in some way to the organisation's strategy. The nature of this relationship was important to the successful implementation of the BSC in this research. Where the strategy was developed but not incorporated in the BSC because day to day operational measures were used instead, the BSC was either abandoned or only functioned as a measurement tool. Whereas on the other hand where strategy was

the fundamental basis of the BSC, these organisations were successful at embedding the BSC into everyday business.

In terms of the principle of measurement versus management, there needs to be clarity at a senior management level about the generic role and purpose of the local BSC system. Those organisations that chose to emphasise the measurement and management roles were more successful at embedding the BSC. Those who did not, either abandoned the project or settled for using it purely as a measurement tool.

The design and process category contained three factors and the researcher proposed a fourth. The first factor was assigning KPI owners, this created a culture of accountability for delivering on their given portfolios. This factor interlinks with elements of the Strategic Human Resource Management category, such as cultural acceptance, to try and avoid a blame culture.

The second success factor within this category was quadrant balance and evolution. Achieving a balanced set of measures in healthcare was a real challenge because of the past culture of finance is 'king'. They also faced the temptation of focusing too much on different areas, such as quality, patient safety, or workforce measures, creating an unbalanced picture. The long-term success of a BSC system was shown to be influenced by the extent to which indicators or measures were regularly reviewed and feedback provided. They also needed to be careful of the common tendency to continually add measures but to not remove outdated ones.

The third critical success factor within this category is data quality and information flows. The provision of accurate information in a timely and appropriate manner was very important to successful implementation of the BSC. To achieve a robust data feed, the organization needs to have appropriate information and reporting systems in place.

The fourth critical success factor proposed by this researcher is the management of all stakeholders, both internal and external to the organisation. Engaging all of the stakeholders both internal and external in the design and process stages had a huge positive impact on the successful implementation and embeddedness of the BSC.

In Rodgers (2011) model the first critical success factor in this category referred to the current system of healthcare contracts between commissioners and providers of care services. While Australian Healthcare organisations do not have the same structure, there are exposed to the same issue. The highest risk here is arguably that the volume of all required measures would be so high that there would be physically not enough space in the BSC system to cater for them, and a lack of strategic management focus as a side effect from this lack of focus.

The second critical success factor within this category was UK healthcare regulation. The regulation of healthcare services within Australia also continues to evolve and keeping up to date with the latest requirements is of utmost necessity for healthcare organizations, especially as typically it is linked to funding. All these regulations and guidelines involve the necessity to meet a range of measures, and it was tempting for organisations to integrate them all into their BSC system. An agreed approach was required to ensure clarity to sufficiently deal with these required regulatory areas within the context of their BSC system, while maintaining their local strategic focus.

The Strategic human resource management category had three critical success factors. This researcher proposes a fourth based on the findings of this research. The first factor is management competency. In essence, this relates to the requirement for senior management within a given organization to have the required level of skills and competencies to facilitate the effective operation of a BSC system. These include listening skills, planning skills, or emotional intelligence. While the individual characteristics of top management were not examined in this study, it did become obvious that the skills of the Champion in particular, were extremely important in the success, as was top managements competence and belief in the BSC.

The second critical success factor in the category was organizational learning. This should be thought about right from the beginning, as there will be some past learning that may need to be undone, before moving forward with the BSC can be achieved. The organisation needs to understand the reasons for the change from the previous system. An open culture of feedback and employee involvement will likely facilitate the functioning of organizational learning further. If an organization does not learn from its

past mistakes, then it is more susceptible to falling into the same traps. This occurred in several of the organisations examined.

The third critical success factor relating to strategic Human Resource Management is the specific role of cultural acceptance and buy-in from organizational members into a BSC system. Key stakeholders within an organization will need to be fully signed up and appreciative of the role, purpose, benefits, and obligations of the BSC for it to be successfully implemented. Support, for example, in the form of consensus building and teaching, would be required to embed the BSC.

The fourth critical success factor proposed by the researcher is the need for top management and the Champion in particular to have the skills and knowledge to handle the known barriers to success within the healthcare sector and their organisation in particular. These barriers include: a top-down approach, use of jargon, too many measures, quantitative versus qualitative measures, process breakdowns, detractors, lack of trust and openness, traditional focus on financial and quality measures, combined with limited time, funding and resources.

Niven (2002) identified the following issues as particularly relevant to the public and not-for-profit sectors including: The difficulty to develop appropriate measures to capture what they are doing, the fear of a hidden agenda or that results will be used to punish, political issues such as the public's view of negative results, short term invest in something that will only last with the current administration, a culture of not trusting business (private sector) solutions, mission fit, and lastly but most importantly no burning platform to change. There needs to be a change agenda for the successful implementation of the BSC.

The researcher based on the findings believes that another missing element from the model for the success of this type of implementation is the overriding importance of it being very much driven as a change agenda. Therefore Stage 3 of the model was the fact that for the implementation to be most successful it needed to be part of a complete change process as this also had an impact on the success of the implementation and the resultant outcomes. Further if they are promoting it as a change agenda, then changes

need to be observed along the way to maintain people's involvement, leading to successfully embedding the BSC within their particular healthcare organisation.

In summary, as was observed in Chapter 4 and between the two case studies in chapter 5, to be successful with implementing and embedding a BSC that is both a measurement and management system it is essential that the factors within both the BSC Adoption model and the Critical Success Factors model be present. This includes the management of stakeholders and the management of potential barriers. This has an overriding premise that these projects are carried out as a total change project/process not as a piece meal, gradual process or as a compliance exercise. Hence from the discussion of the findings in chapters 4 and 5, it was possible to find support for both the BSC Adoption Model and the Critical Success Factor Model.

6.2. Limitations

As with all qualitative research the results cannot be generalised across the population of healthcare organisations, more samples in the form of a survey would be useful to add weight to the conclusions of this study. Having said that, these results are consistent with the results being published out of Canada and the UK which have healthcare systems most aligned with those in Australia.

While the researcher has tried to avoid bias both within the collection and interpretation of the data, and by using another coder, obviously bias cannot totally be eliminated as certain beliefs and views were naturally formed whilst writing the literature review.

The sample size is small, but the resultant themes emerged very early in the interviewees and were consistent across the interviews. These were consistent despite the outcome i.e. whether the organisation was successful at embedding the BSC as a measurement and management system or only used it as a measurement system or if they abandoned the BSC altogether.

This research also acknowledges that while relationships have been established between some of the factors, it was not always possible to indicate the direction of the causation between the factors. But this limitation is outweighed by the richness and relevance of the data collected.

6.3. Contribution to Practice

The major contribution in terms of practitioners is that to achieve successful implementation and the resultant positive outcomes, these types of major projects needed to be implemented as an entire change process. Organisation B chose some rural hospitals like organisation J to pilot the BSC project and then asked them to showcase their project. But because each organisation was to implement their own BSC with their own strategy this aspect did not have the desired result. Also, the pilot projects were in small rural organisations and yet the majority of organisation within organisation B, were large metro organisations, who faced different challenges in terms of achieving the measures of the BSC and the implementation process. Hence the first major contribution is that each organisation needed to view the BSC as a change process based on strategy and therefor 'ready/educate' the organisation as much as possible.

Another contribution was about how 'achieving cultural acceptance' was a major part of the work of the BSC project by the Champions within the successful organisation. Therefore, practitioners need to understand their own culture and the possible impacts on the implementation of a BSC within that culture. The communication and education process are critical in achieving this cultural acceptance. As based on the Characteristics of these organisations and healthcare generally, there were three major areas to address to overcome the resistance, i.e., traditional focus on finance, divisional silos and the impost on day to day business, and the view that these new systems were just 'Fads' or compliance exercises. This knowledge will arm practitioner to be mindful of the current culture within their organisation and educate themselves around how to manage these issues.

The other contribution to practitioners is the fact that the major advantages come when the external and internal stakeholders are engaged in the process. A culture of openness, exchange and participation by each of the stakeholders let to better outcomes. And that this openness led to better synergies and the 'fear of criticism' did not materialise for the open sharing organisations.

A further contribution was that if practitioners think about the potential barriers beforehand, then those barriers will be easier to manage during the project. It was a major exercise within each of these organisations to breakdown the natural divisional silos in healthcare. Not all of the organisations were all too and hence struggled to successfully implement and embed the BSC within their organisation.

6.4. Contribution to Theory

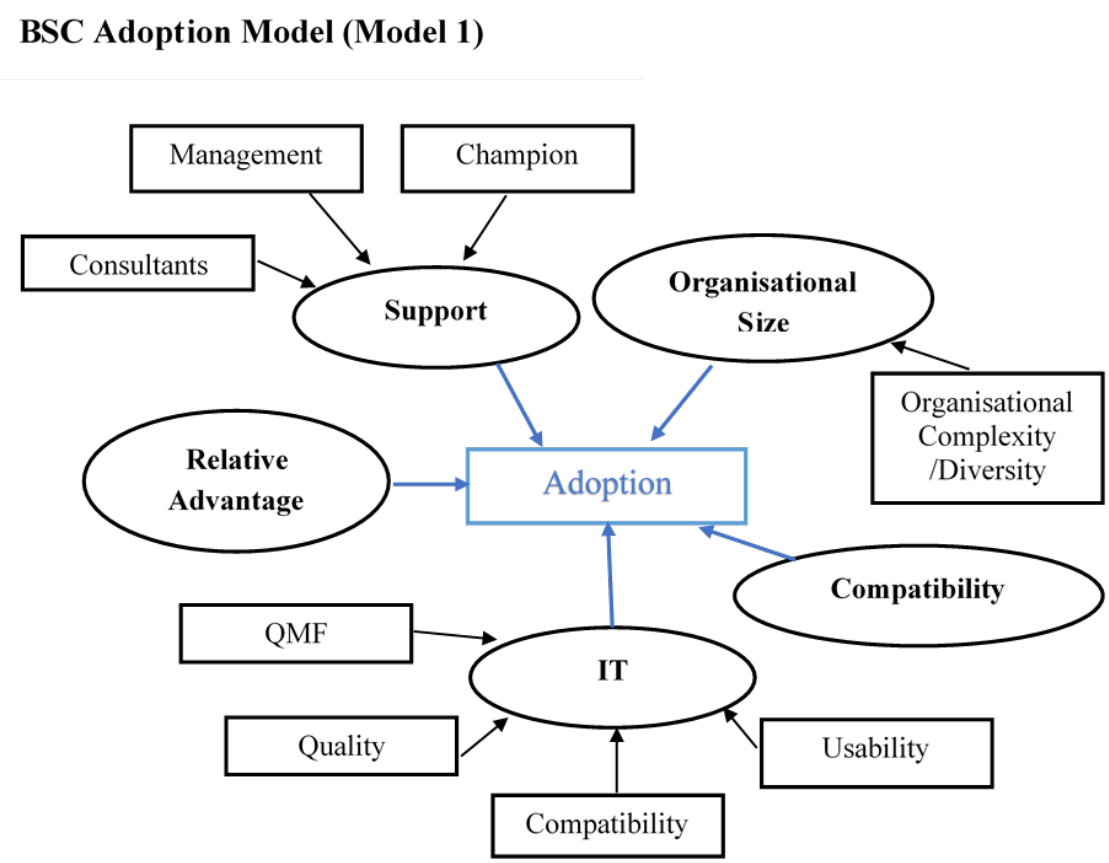
The major contribution to the theory was the development of the BSC Adoption Model and the modification of the Critical Success Factor Model. As not all the adoption and implementation factors could be represented in the one model.

The adoption model has been modified below in line with the findings of this research. As can be seen Size had both a positive and negative impact depending on other factors within the Critical Success Factor model, such as cultural acceptance, which is why the conceptual framework shows the interaction of culture between the models and the successful outcome of the BSC implementations. Where the stakeholders and barriers were managed well within the BSC project, size did not seem to have either a positive or negative impact, as they managed to achieve a view within their organisation, that they were just one organisation with a common strategy, goals and initiatives.

Information Technology Quality/Usability also had both a negative and positive impact within the organisations again depending on the implementation process engaged by the Champion, within the critical success factors such as information flow and the understanding and timeliness of the information provided and reported by the system. This factor also interacted with the Accountability factor in the CSF model. Where

there was high accountability, then the Information Technology system used did not seem to matter.

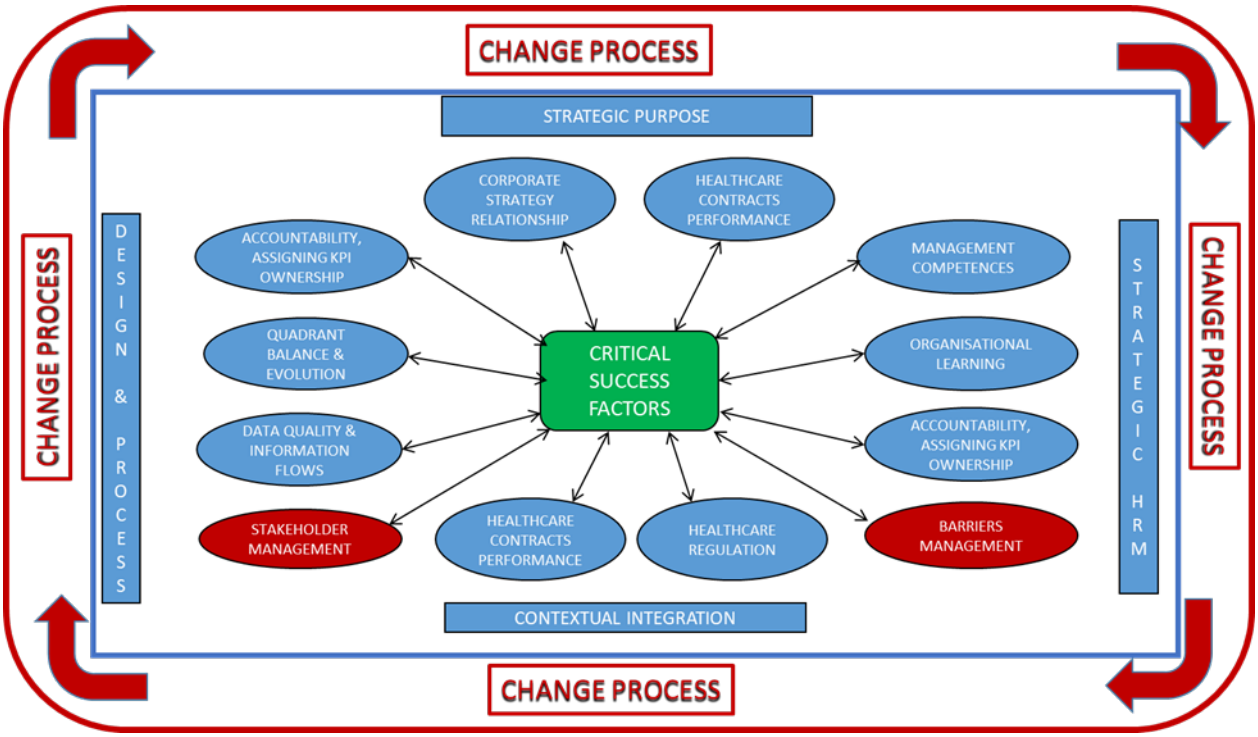
Diagram 6.1 BSC Adoption Model



The major contribution by this research to the critical success factor model is firstly, the management of the barriers to implementation from the beginning of the project. As can be seen from both the interviews and the two case studies the recognition of the potential barriers prior to the project or early in the project has an impact on the success of the implementation of the BSC. The divisional silos were definite barriers within healthcare and a plan needs to be established on how to deal with these issues. Do you take a hard line and demand acceptance or retrenchment or do you take an educational, participative approach, to break down the silos and help people see themselves as one organisation, with a common strategy?

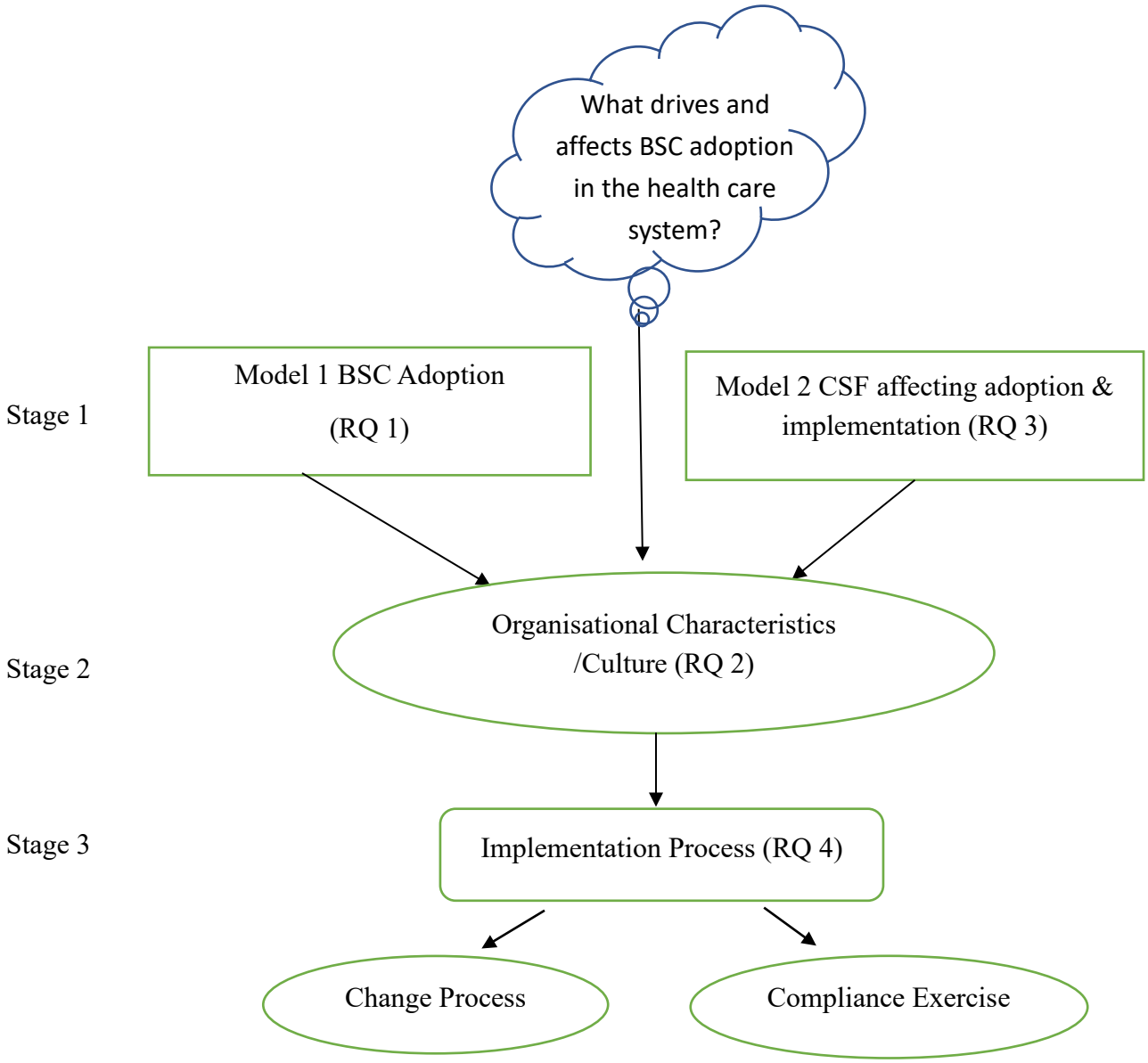
Secondly, the importance of managing and involving both the internal and external stakeholders in all stages of the BSC project. Thirdly but most importantly that this implementation should be undertaken as a 'Change Process' to achieve the best possible outcomes and advantages the BSC system can bring to the organisation.

Diagram 6.2 Modified Critical Success Factor Model (Rodgers, 2011)



A further contribution of this research to theory development was the conceptual framework examining the issue of what drives and affects BSC adoption in Australian Healthcare Systems. It illustrates the interaction of the of two models, mediated by the characteristics of the organisation and the healthcare sector, represented by the term Organisational Characteristics/Culture in the conceptual framework diagram. It also illustrates the different implementation process, and the findings discuss the impacts/outcomes from the different processes employed.

Diagram 6.3 Conceptual Framework



6.5. Future research

A potential area for future research is whether the implementation of a BSC results in improved healthcare provider performance. Some research has been done in this area in the private sector (Davis & Albright, 2004; Braam & Nijssen, 2004; Iselin, et al., 2004), but very little has been done in the public arena (Wilson et al., 2003).

Another area of potential research could be to provide a clearer definition of the BSC as it is used in healthcare. That is, research could try and establish what makes the difference between a multi-dimensional performance measurement system and a balanced scorecard, as the two systems seem to be used interchangeable in the research about performance measurement systems in healthcare and the public sector generally. In this research the BSC appeared to mean different things to different division within the healthcare organisations. Hence research could be untaken to examine whether different divisions views of the BSC has a positive or negative impact on the successful implementation of a BSC system.

Potential future research could also be undertaken to see if Kavanagh's (2002) model of the effects of individual values, organisational culture and the method of acculturation could be applied to expand the BSC critical success factor model and help explain the anomalies identified in chapter 6.

In line with Lapsley and Wright (2004) quoted below, there needs to be more research into the successful diffusion of the BSC in healthcare organisations:

> "The results of this survey indicate that accounting innovations have mainly originated in the private sector and adoption of these innovations by public sector organisations is largely attributable to government influence. The diffusion of technical knowledge is generally through traditional sources such as professional membership and publications. Monitoring and abandoning accounting techniques are not carried out to any significant degree and non-financial managers have a mixed involvement with the development of accounting techniques. Furthermore, the process by which the government determines which accounting practices are to be recommended for adoption merits serious investigation as part of the diffusion process." (p372)

The source of diffusion could be an interesting area of study, as this could also have the potential to impact on successful implementation of innovations, like the BSC. As noted by Bjørnenak's (1997) diffusion types, like hierarchical diffusion, can be observed by the information from government trickling down to the individual organisational level.

Contagious diffusion could occur through CIPFA and other professional associations. The diffusion of an innovation via skilled workers moving from private sector enterprise to public administration was outside the scope of this study but would also be a potential research area.

Another potential area of further research emanates from Abrahamson's (1991) conceptual matrix, his results indicate that it can explain some of the reasons behind adoption in the survey. KPIs could be explained through forced selection, in that the adopters had to apply the technique due to statutory requirements, regardless of the costs and benefits to their organisation. In addition, the fashion perspective goes some way in explaining the use of ABC, being a recommended technique by government and by other external sources. Nonetheless, ABC can also be explained under efficient choice, helping the departments to cost more effectively in a time when it is necessary to tightly control expenditure. It is likely that the occasional use of techniques such as target costing or functional analysis can also be explained using the matrix.

However, Abrahamson (1991) acknowledge that the explanatory power of the matrix has its limits, as the perspectives are mutually exclusive. Transitions between perspectives are not built into the model, so that while the introduction of KPIs may be explained through forced selection, this does not explain internal creation of additional performance indicators. A second drawback is the lack of political variables embodied in the framework. Many decisions in the public sector are politically motivated and this element cannot be disregarded in the conceptual analyses. Some alteration to the matrix, therefore, would be required for future research. This thesis research reinforces the importance of include the political element into the framework.

Gallivan's (2001) exposition of diffusion as a two-stage adoption process, applied by Perera et al. (2003) is useful in explaining the difference between adoption of an accounting technique by government and the acceptance of the technique by the public sector accountants. It allows a time lag to exist between the two and therefore may explain the difference in attitudes between local authority accountants in adopting KPIs.

If the presumption was extended to include a third-stage adoption, i.e. when everyone outside finance accepted the innovations, more explanation may be found. A third stage could explain the difference in the involvement and attitudes of some non-financial managers towards the development of accounting techniques. However, their staggered adoption process did not explain diffusion outside of an individual organisation and thus their stages model needed to be used in conjunction with other frameworks. The stages of adoption also were important in terms of the impact of factors in this thesis, therefore I reinforce this call for further research.

To date previous studies were not able to provide a full explanation of the diffusion of management accounting innovations in the public sector. Further study could look at the monitoring and abandonment of techniques, as there have been some interesting results around the legitimating function of accounting.

Another area of potential research could examine, "is there a certain number of roles that the BSC does or should perform before the BSC can be successfully embedded into an organisation?". Related to this could be the question, "is there a connection between the number of roles performed and the outcomes achieved?"

Research to date highlights that the changes in management accounting practice may not find complete explanation through diffusion theory alone. Other perspectives, such as legitimation studies (see, for example, (Kurunmáki & Miller, 2006, Kurunmáki et al., 2003)) may enhance explanations of the diffusion process greatly. More new theoretical developments in innovation in the public sector are therefore desirable.

BIBLIOGRAPHY

Abernethy, M. A. (1996). Physicians and resource management: the role of accounting and non-accounting controls. Financial Accountability & Management, 12(2), 141-156.

Abernethy, M. A., & Bouwens, J. (2005). Determinants of accounting innovation implementation. ***ABACUS***, 41(3), 217-240.

Abernethy, M. A., & Brownell, P. (1999). The role of budgets in organizations facing strategic change: an exploratory study. Accounting, Organizations and Society, 24(3), 189-204.

Abernethy, M.A., & Chua, W.F. (1996). A field study of control system "redesign": The impact of institutional processes on strategic choice. Contemporary Accounting Research, 13, 569-606

Abernethy, M. A., Chua, W.F., Grafton, J., & Mahama. H. (2007) Accounting and Control in Health Care: Behavioural, Organisational, Sociological and Critical Perspectives. Handbooks of Management Accounting Research, Editors: Christopher S. Chapman, Anthony G. Hopwood, Michael D. Shields, Volume 2, 805-829

Abernethy, M. A., Chua, W.F., Luckett, P.F., & Selto, F.H. (1999). Research in Managerial Accounting: Learning from others' experiences. Accounting and Finance, 39(1), 1-27.

Abernethy, M. A., & Guthrie, C. H. (1994). An empirical assessment of the fit between strategy and management information systems design. Accounting and Finance, 33, 49-66.

Abernethy, M. A. & Lillis, A. M. (2001). Interdependencies in organization design: a test in hospitals. Journal of Management Accounting Research, 13(1), 107–129.

Abernethy, M. A., & Stoelwinder, J.U. (1990). Physicians and Resource Management in Hospitals: An Empirical Investigation. Financial Accountability & Management, 6(1), 17-31.

Abernethy, M. A., & Stoelwinder, J.U. (1991). Budget use, task uncertainty, system goal orientation and subunit performance: A test of the 'fit' hypothesis in not-for-profit hospitals. Accounting, Organizations and Society, 16(2), 105-120.

Abernethy, M. A., & Stoelwinder, J.U. (1995). The role of professional control in the management of complex organizations. Accounting, Organizations and Society, 20(1), 1-17.

Abrahamson, E. (1991). Managerial fads and fashions: the diffusion and rejection of innovations. Academy of Management Review, 7, 586-612.

Adair, C., Simpson, E., Casebeer, A., Birdsell, J., Hayden, K., & Lewis, S. (2006). Performance Measurement in Healthcare: Part II – State of the Science Findings by Stage of the Performance Measurement Process. Healthcare Policy, 2(1), 56-78.

Aidemark, L-G. (2001). The meaning of balanced scorecards in the health care organisation. Financial Accountability & Management, 17(1), 23-40.

Aidemark, L-G., & Funck, E. (2009). Measurement and Health Care Management. Financial Accountability & Management, 25(2), 253-276.

Alshamari, M. (2016). Usability Factors Assessment in Health Information System. Computer Science & Communications. 8(6) 170-180.

Anderson, S. W. (1995). A framework for assessing cost management system changes: The case of activity-based costing. Journal of Management Accounting Research, 7, 1-51.

Anderson, S. W., & Young, M. S. (1999). The impact of contextual and process factors on the evaluation of activity-based costing systems. Accounting, Organizations and Society, 24(7), 525-559.

Anonymous. (1999). Hilton Pride: Going for the Green. Lodging Hospitality, 55(9), 25.

Anonymous. (2001a). 2001 CMG Survey on performance measurement--The Balanced Scorecard: Practices and benefits. Cost Management Update, 117, 1-2.

Anonymous. (2001b). Balanced Scorecard is fast becoming a must have process for corporate change. Management Services, 45(8), 5.

Argyris, C. (1964). Integrating the individual and the organization. New York: Wiley.

Atkinson, A. A., Balakrishnan, R., Booth, P., & Cote, J. M. (1997). New directions in management accounting research. Journal of Management Accounting Research, 9, 79.

Attewell, P. (1992). Technology diffusion and organizational learning: the case of business computing. Organization Science, 3, 1-19.

Ax, C., & Greve J. (2017). Adoption of management accounting innovations: Organizational culture compatibility and perceived outcomes. Management Accounting Research, 34, 59-74.

Backman, C., Vanderloo, S., & Forster, A.J. (2016). Measuring and improving quality in university hospitals in Canada: The Collaborative for Excellence in Healthcare Quality. Health Policy, 120(9), 982-986.

Bakkali, C., Maurice, J., & Naro, G. (2016). The Balanced Scorecard as a Boundary Object: From Diagnostic to Interactive Control, Post-Print halshs-01369412, HAL.

Ballantine, J., Brignall, S., & Modell, S. (1998). Performance measurement and management in public health services: a comparison of U.K. and Swedish practice. Management Accounting Research, 9, 71-94.

Bandury, J., & Nahapiet, J. (1979) Towards a Framework for the Study of the Antecedents and Consequences of Information Systems in Organizations. Accounting Organizations and Society 4(3),163-177

Banker, R., Janakiraman, S., & Konstans, C. (2001). Performance Measures and the Balanced Scorecard. Financial Executives Research Foundation, 1-3.

Banker, R. D., Potter, G., & Schroeder, R. G. (1993). Reporting manufacturing performance measures to workers: an empirical investigation. Journal of Management Accounting Research, 5, 34-55.

Banker, R. D., Chang, H. H., & Pizzini, M. (2004). The Balanced Scorecard: Judgmental Effects of Performance Measures Linked to Strategy. The Accounting Review, 79(1), 1-23.

Banker, R. D., Chang, H. H., & Pizzini, M. (2011). The Judgmental Effects of Strategy Maps in Balanced Scorecard Performance Evaluations. International Journal of Accounting Information Systems, 12(4), 259-279.

Barden, P. (2004). Non-prescription remedy. 26. Retrieved from http://proquest.umi.com/pqdweb?did=624315931&Fmt=7&clientId=13713&RQT=309&VName=PQD

Barkdoll, J. (2000). Balanced scorecards in the federal government. Public Manager, 29(3), 43-45.

Barnabe`, F., & Busco, C. (2012). The causal relationships between performance drivers and outcomes Reinforcing balanced scorecards' implementation through system dynamics models. Journal of Accounting & Organizational Change, 8(4), 528-538.

Barney, J. B. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. Management Science, 32(10), 1231-1242.

Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99-120.

Bell, J. (2000). Doing your research project: a guide for first-time researchers in education and social science. Buckingham: Open University Press.

Bergeron, B. P. (2017). Performance Management in Healthcare from Key Performance Indicators to Balanced Scorecard (2 ed.). New York: Productivity Press.

Berkman, E. (2002). How to use the Balanced Scorecard; You can't tell when you're winning if you don't keep score. The Balanced Scorecard helps track your hits and misses. CIO, 15(15), 93-100.

Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation. MIS Quarterly, 24(1), 169-196.

Bible, L., Kerr, S., & Zanini, M. (2006). The Balanced Scorecard: Here and Back. Management Accounting Quarterly, 7(4), 18-26.

Biddle, G. C., Bowen, R. M., & Wallace, J.S. (1998). Does EVA beat earnings? Evidence on the association with stock returns and financial values. Journal of Accounting and Economics, 24, 301-336.

Bilkhu-Thompson, M. K. (2003). A Process Evaluation of a Health Care Balanced Scorecard. Journal of Health Care Finance, 30(2), 37.

Birnberg, J. G., Shields, M.D. & Young, S.M. (1990). The case for multiple methods in empirical research in management accounting (with an illustration from budget setting). Journal of Management Accounting Research, 2(Fall), 33-66.

Bjørnenak, T. (1997). Diffusion and accounting: The case of ABC in Norway. Management Accounting Research, 8(Issue 1), 3.

Bjørnenak, T., & Olson, O. (1999). Unbundling management accounting innovations. Management Accounting Research, 10, 325-338.

Bloomquist, P., & Yeager, J. (2008). Using Balanced Scorecards to Align Organizational Strategies. Healthcare Executive, Jan/Feb, 24-27.

Bobe, B. J., Mihret, D. G., & Obo, D. D. (2017). Public-sector reforms and balanced scorecard adoption: an Ethiopian case study. Accounting, Auditing & Accountability Journal, 30(6), 1230-1256.

Boltlee, C. E., & Swain, M. (2016). Highlights of management accounting research. Journal of Accountancy, 1-3.

Booth, P., & Giacobbe, F. (1998). The Impact of Demand and Supply Factors in the Diffusion of Accounting Innovations: the Adoption of Activity-Based Costing in Australian Manufacturing Firms. Paper presented at the Sixth Biennial Management Accounting Research Conference, University of NSW, Sydney.

Bourne, M., Mills, J., & Faull, N. (2003). Operations strategy and performance: a resource-based perspective. In International Journal of Operations & Production Management (Vol. 23, pp. 944): Emerald.

Bouwens, J., & Abernethy, M. A. (2000). The consequences of customization on management accounting system design. Accounting, Organizations and Society, 25(3), 221-259.

Braam, G., J. M., & Nijssen, E., J. (2004). Performance Effects of Using the Balanced Scorecard: a note on the Dutch experience. 37(4), 335. Retrieved from http://proquest.umi.com/pqdweb?did=672464081&Fmt=7&clientId=13713&RQT=309&VName=PQD

Brewer, P. C., & Speh, T. W. (2000). Using the balanced scorecard to measure supply chain performance. Journal of Business Logistics, 21(1), 75-93.

Brignall, S., & Ballantine, J. (2004). Strategic Enterprise Management Systems: new directions for research. Management Accounting Research, 15, 225-240.

Bromwicha, M., & Scapensb, R. (2016). Management Accounting Research: 25 years on. Management Accounting Research, 31, 1-9.

Brown, D. A. Booth., P, & Giacobbe, F. (2001). Technological and Organisational influences on the Adoption of Activity-Based Costing in Australia. Working paper, University of Technology, Sydney.

Brown, D. A. Booth., P, & Giacobbe, F. (2004). Technological and organizational influences on the adoption of activity-based costing in Australia. Accounting and Finance, 44(4), 329-356.

Brownell, P. (1982). The role of accounting data in performance evaluation, budgetary participation, and organizational effectiveness. Journal of Accounting Research, 20(1), 12-27.

Brownell, P., & Hirst, M. K. (1986). Reliance on accounting information, budget participation, and task uncertainty: test of a three-way interaction. Journal of Accounting Research, Autumn, 241-249.

Brownell, P. (1987). The role of accounting information, environment and management control in multi-national organisations. Accounting and Finance, 27(1), 1-16.

Brudan, A. (2005). Balanced Scorecard Typology and Organizational Impact. The act KM Online Journal of Knowledge Management, 2 (1), 1-25.

Burgess, R.G. (1982). Field Research: A Source Book and Field Manual. London, Allen & Unwin.

Burns Jr., W. J., & Waterhouse, J. H. (1975). Budgetary control and organisational structure. Journal of Accounting Research, Autumn, 177-203.

Burns, T., & Stalker, G. (1961). The management of innovation. London: Tavistock.

Bush, P. (2005). Strategic Performance Management in Government: Using the Balanced Scorecard. 19(3), 24. Retrieved from http://proquest.umi.com/pqdweb?did=846330081&Fmt=7&clientId=13713&RQT=309&VName=PQD

Campbell, D., Datar, S. M., Kulp, S. L., & Narayanan V. G. (2015) Testing Strategy with Multiple Performance Measures: Evidence from a Balanced Scorecard at Store24. Journal of Management Accounting Research 27(2) 39-65.

Castner, G. J. (2003). A model of cluster adoption: The role of transaction costs, resource characteristics and technology. (PhD), The University of Queensland,

Chan, Y. C., & Seaman, A. (2008). Strategy, structure, performance management, and organizational outcome: Application of balanced scorecard in Canadian health care organizations. Advances in Management Accounting, 17, 151-180.

Chan, Y-C. L. (2004). Performance measurement and adoption of balanced scorecards: A survey of municipal governments in the USA and Canada. International Journal of Public Sector Management, 17(3), 204-222.

Chang, L. C., Lin, S. W., & Northcott, D. N. (2002). The NHS Performance Assessment Framework: A "balanced scorecard" approach? Journal of Management in Medicine, 16(4/5), 345.

Chang, W-C. Tang., Y-C., Huang C-H., & Yang, M-C. (2008). Performance improvement after implementing the Balanced Scorecard: A large hospital's experience in Taiwan. Total Quality Management, 19(11), 1143-1152.

Chapman, C. S. (1997). Reflections on a contingent view of accounting. Accounting, Organizations and Society, 22, 189-205.

Chapman, C. S. (1998). Accountants in organizational networks. Accounting, Organizations and Society, 23(8), 737-766.

Chen, X-Y., Yamauchi, K., Kato, K., Nishimura, A., & Ito K. (2006). Using the balanced scorecard to measure Chinese and Japanese hospital performance. International Journal of Health Care Quality Assurance, 19(4), 339-350.

Chen, H-F., Hou, Y.H., & Chang, R.E. (2012). Application of the balanced scorecard to an academic medical center in Taiwan: The effect of warning systems on improvement of hospital performance. Journal of the Chinese Medical Association, 75(10), 530-535.

Cheng, M. M., & Humphreys, K. A. (2012). The differential improvement effects of the strategy map and scorecard perspectives on managers' strategic judgments. The Accounting Review, 87(3), 899–924.

Chenhall, R., & Morris, D. (1986). The impact of structure, environment and interdependencies on the perceived usefulness of management accounting systems. Accounting Review, 61, 16-35.

Chenhall, R., & Morris, D. (1993). The role of post completion audits, managerial learning, environmental uncertainty and performance. Behavioural Research in Accounting, 5, 170-186.

Chenhall, R., & Morris, D. (1995). Organic decision and communication processes and management accounting systems in entrepreneurial and conservative business organizations. Omega, International Journal of Management Science, 23(5), 485-497.

Chenhall, R. H. (1997). Reliance on manufacturing performance measures, total quality management and organizational performance. Management Accounting Research, 8, 187-206.

Chenhall, R. H., & Langfield-Smith, K. (1998a). Adoption and benefits of management accounting practices: An Australian study. Management Accounting Research, 9(1), 1-17.

Chenhall, R. H., & Langfield-Smith, K. (1998b). Factors influencing the role of management accounting in the development of performance measures within organisational change programs. Management Accounting Research, 9(4), 361-386.

Chenhall, R. H., & Langfield-Smith, K. (1998c). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. Accounting, Organizations and Society, 23(3), 243-264.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. Accounting, Organizations and Society, 28(2/3), 127-168.

Chenhall, R. H. (2007). Theorizing Contingencies in Management Control Systems Research. In C. Chapman, Hopwood, A., Shields, M. (Ed.), Handbook of Management Accounting Research (Vol. 1, pp. 163-205). Cambridge: Elsevier Science & Technology.

Chong, V., & Chong K. (1997). Strategic choices, environmental uncertainty and SBU performance: a note on the intervening role of management accounting systems. Accounting and Business Research, 27(4), 268-276.

Chow, C. W., Ganulin, D., Haddad, K., & Williamson, J. (1998). The balanced scorecard: A potent tool for energizing and focusing healthcare organization management. Journal of Healthcare Management, 43(3), 263.

Chow-Chua, C., & Goh, M. (2002). Framework for evaluating performance and quality improvement in hospitals. Managing Service Quality, 12(1), 54.

Chua, W. F. (1995) Experts, networks and inscriptions in the fabrication of accounting images: A story of the representation of three public hospitals. Accounting, Organizations and Society, 20(2–3), 111-145.

Chua, W.F & Degeling, P. (1993) Interrogating an Accounting-based Intervention on Three Axes: Instrumental, Moral and Aesthetic. Accounting, Organizations and Society 18(4), 291-318

Cifalinò, A. & Baraldi, S. (2009), 'Training programs and performance measurement: evidence from healthcare organisations', Journal of Human Resource Costing and Accounting, 13, 4, 2014–315.

Clarke, P., Hill., N., & Stevens, K. (1997). Activity-Based Costing in Ireland: Barriers to and Opportunities for Change. Working paper, University College Dublin.

Clegg, S. R., Hardy, C., & Nord, W. R. (1996). Handbook of Organization Studies. London: SAGE Publication.

Cleven, A., Mettler, T., Rohner, P., & Winter, R. (2016). Healthcare quality innovation and performance through process orientation: Evidence from general hospitals in Switzerland. Technological Forecasting and Social Change, 113(B), 386-395.

Cleverley, W., O., & Cleverley, J., O. (2005). scorecards and dashboards: using financial metrics to improve performance. 59(7), 64. Retrieved from http://proquest.umi.com/pqdweb?did=868770721&Fmt=7&clientId=13713&RQT=309&VName=PQD

Clinton, B. D., & Hsu, K-C. (1997). JIT and the balanced scorecard: Linking manufacturing control to management control. Management Accounting, 79(3), 18.

Coase, R. H. (1937). The Nature of the Firm. Economica, New Series, 4(16), 386-405.

Cobbold, I. E., & Lawrie, G. G. (2002). The development of Balanced Scorecard as Strategic Management Tools. PMA conference (pp. 1-9). Boston USA: e2GC Conference.

Cohen, A. (1999). Are Consultants Worth It? Sales and Marketing Management, 151(9), 32-42.

Coombs, R. W. (1987). Accounting for the control of doctors: management information systems in hospitals. Accounting, Organizations and Society, 12(4), 389–404.

Cooper, R. (1988). The Rise of Activity-Based Costing - Part Two: When Do I Need an Activity-Based System? Journal of Cost Management, (winter), 34-36.

Cooper, R. & Kaplan, R. S. (1988). Measure costs right: make the right decisions. Harvard Business Review, 66, 96-103.

Cooper, R. B., & Zmud, R. W. (1990). Information Technology Implementation Research: A Technological Diffusion Approach. Management Science, 36(2), 123.

Cooper, D. J., Ezzamel, M., & Qu, S. Q. (2012). Popularizing a management Accounting Idea: The Case of the Balanced Scorecard. (M. Paper, Ed.) AAA 2012 Management Accounting Section (MAS) Meeting Paper.

Covaleski, M. A., Dirsmith, M. W. & Michelman, J. E. (1993). An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organizations. Accounting, Organizations and Society, 18(1), 65-80.

Daft, R. (1983). Organization theory and design. New York: West.

Dalton, J. (2002). Strategic score-keeping. Association Management, 54(6), 53-57.

Damanpour, F. (1991). Organisational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. Academy of Management Journal, 34(3), 555-590.

Davila, T. (2000). An empirical study on the drivers of management control systems' design in new product development. Accounting, Organizations and Society, 25, 383-409.

Davis, S., & Albright, T. (2004). An investigation of the effect of Balanced Scorecard implementation on financial performance. 15(2), 135. Retrieved from http://proquest.umi.com/pqdweb?did=841494401&Fmt=7&clientId=13713&RQT=309&VName=PQD

De Vaus, D. A. (2002.). Surveys in social research (5th ed. ed.). St. Leonards, N.S.W.: Allen & Unwin.

de Waal, A. (2003). Behavioral Factors Important for the Successful Implementation and Use of Performance Management Systems. Management Decision, 41(8), 688-697.

Dechow, N. (2012). The balanced scorecard: subjects, concept and objects – a commentary. Journal of Accounting & Organizational Change, 8(4), 511-527.

Decramer, A., Christiaens, J., & Vanderstraeten, A. (2008). Implementation Dynamics of Performance Management in Higher Education University College Ghent.

Denton, G. A., & White, B. (2000). Implementing a Balanced-scorecard Approach to Managing Hotel Operations. Cornell Hotel and Restaurant Administration Quarterly, 41(Issue 1), 94.

Dimitropoulos, P. E. (2017). Performance Management in Healthcare Organizations: Concept and Practicum. Advances in Experimental Medicine and Biology, 989, 11-19.

Dobrzeniecki, M., & Barkdoll, G. (2004). Adapting the Balanced Scorecard to Federal Government Agencies. PA TIMES(August), 19-20.

Dunk, A. (1993). The effects of budget emphasis and information asymmetry on the relation between budgetry participation and slack. The Accounting Review, 2, 400-410.

Dunk, A., & Nouri, H. (1998). Antecedents of budgetry slack: a literature review and synthesis. Journal of Accounting Literature., 17, 72-96.

Easterby-Smith, M., Thorpe, R. & Lowe, A. (1991). Management Research: An Introduction. London, Sage Publications.

El-Jardali, F., Saleh, S., Ataya, N., & Jamal, D. (2011). Design, implementation and scaling up of the balanced scorecard for hospitals in Lebanon: Policy coherence and application lessons for low- and middle-income countries. Health Policy, 103(2-3), 305-314.

Emsley, D. (2000). Variance analysis and performance: two empirical studies. Accounting, Organizations and Society, 25(1), 33-47.

Epstein, M. J., & Manzoni, J-F. (1997). The balanced scorecard and tableau de bord: Translating strategy into action. Management Accounting, 79(2), 28.

Epstein, M. J., & Manzoni, J-F. (1998). Implementing corporate strategy: From tableaux de Bord to Balanced Scorecards. European Management Journal, 16(Issue 2), 190.

Errami, Y. & Guehair, N., (2018). Organisational Innovativeness and Management tools Adoption: the case of the Balanced Scorecard. Gestion 2000, 35(3), 7-70.

Evans, N. (2005). Assessing the balanced scorecard as a management tool for hotels. 17(4/5), 376. Retrieved from http://proquest.umi.com/pqdweb?did=884535251&Fmt=7&clientId=13713&RQT=309&VName=PQD

Ezzamel, M. (1990). The impact of environmental uncertainty, managerial autonomy and size on budget characteristics. Management Accounting Research, (1), 181-197.

Faezah, N., Shukri, M., & Ramli, A. (2015). Organizational Structure and Performances of Responsible Malaysian Healthcare Providers: A Balanced Scorecard Perspective. Procedia Economics and Finance, 28, 202-212.

Farneti, F., & Guthrie, J. (2008). Italian and Australian Local Governments: Balanced Scorecard Practices, A Research Note. Journal of Human Resource Costing and Accounting, 12 (1), 4-13.

Ferguson, C., Finn, F., & Hall, J., (2003). Electronic Commerce Investments, the Resource-Based View of the firm, and Firm Market Value. Working paper UQBS, 1-36.

Fiondella, C., Macchioni, R., Maffei, M., & Spanò, R. (2016). Successful changes in management accounting systems: A healthcare case study. Accounting Forum, 40(3), 186-204.

Fischer, C. S. & Carroll., G. R. (1986). The diffusion of the telephone and automobile in the United States, 1902 to 1937. Working paper OBIR-8, Graduate School of Business, University of California.

Flamholtz, E. G. (1983): Accounting, budgeting and control systems in their organizational context: Theoretical and empirical perspectives. Accounting, Organizations and Society 8 (2-3), 153- 169.

Flick, U. (1998) An Introduction to Qualitative Research. Sage Publications Ltd

Forgione, D. A. (1997). Health care financial and quality measures: International call for a "balanced scorecard" approach. Journal of Health Care Finance, 24(1), 55.

Foster, G., & Swenson, D.W. (1997). Measuring the success of activity-based cost management and its determinants. Journal of Management Accounting Research, 9, 107-139.

Frigo, M. (2002a). Nonfinancial performance measures and strategy execution. Strategic Finance, 84(2), 6.

Frigo, M. (2002b). Strategy and the balanced scorecard. Strategic Finance, 84(5), 6-9.

Frigo, M., & Litman, J. (2001). What is strategic management? Strategic Finance, 83(6), 8.

Galbraith, J. (1973). Designing complex organizations. USA: Addison Wesley Publishing Company.

Gallagher, J. (2018) Remarkable' decline in fertility rates. https://www.bbc.com/news/health-46118103

Gallivan, M.J. (2001). Organizational adoption and assimilation of complex technological innovations: development and application of a new framework. Database Advances Info. Systems, 32(3), 51-85

Gao, T., & Gurd, B. (2006). The Impact of Long Term Orientation and Diffusion of Innovation on BSC Use in Australian Hospital. Paper presented at the Australia and New Zealand Third Sector Research, Adelaide.

Ghomian, M. Moradi., M., & Shorvarzi, M. R. (2011). Balanced Scorecard and Performance Evaluation of Public Sector Organizations. JERA, 1(1), 101-121.

Gill, J., & Johnson, P. (1991). Research Methods for Managers. London, Paul Chapman Publishing Ltd.

Ginzberg, M. J., (1980) An Organizational Contingencies View of Accounting and Information Systems Implementation, Accounting, Organizations and Society, 5(4) 369-382.

Golden-Biddle, K., & Locke, K. (1993). Appealing work: An investigation of how ethnographic texts convince. Organization Science, 4, 595-616

Goodspeed, S. W. (2003). Translating strategy into action: The balanced scorecard. (D.H.A.), Medical University of South Carolina - College of Health Professions, United States -- South Carolina. Retrieved from http://proquest.umi.com/pqdweb?did=765963611&Fmt=7&clientId=13713&RQT=309&VName=PQD

Gordon, L.A., & Miller, D. (1976). A contingency framework for the design of accounting information systems. Accounting, Organizations and Society, 1(1), 59-70.

Gordon, L. A., & Narayanan, V. K., (1984). Management accounting systems, perceived environmental uncertainty and organization structure: an empirical investigation. Accounting, Organizations and Society, 9(1), 33-47.

Gosselin, M. (1997). The effect of strategy and organizational structure on the adoption and implementation of activity-based costing. Accounting, Organizations and Society, 22(2), 105-122. Retrieved from http://www.sciencedirect.com/science/article/B6VCK-3SWV6HC-1/1/7b62e62f6f3d367212d850e640261289

Gosselin, M. (2011). Contextual factors affecting the deployment of innovative performance measurement systems. Journal of Applied Accounting Research, 12(3), 260-277.

Govindarajan, V. (1986). Impact of participation in the budgetary process on managerial attitudes and performance: universalistic and contingency perspectives. Decision Sciences, 17, 496-516.

Greatbanks, R., & Tapp, D. (2007). The impact of balanced scorecards in a public sector environment. International Journal of Operations & Production Management, 27(8), 846-873.

Griffiths, J. (2003). Balanced Scorecard Use in New Zealand: Government Departments and Crown Entities. 2003, 62(4), 70-79.

Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012,). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. Omega, International Journal of Management Science, 40(1), 104 - 119.

Guilding, C. (1999). Competitor-focused accounting: an exploratory note. Accounting, Organizations and Society, 24(7), 583-595.

Guilding, C., & Pike, R. (1994). Brand valuation: A model and empirical study of organisational implications. 24(95), 241. Retrieved from

http://proquest.umi.com/pqdweb?did=7549331&Fmt=7&clientId=13713&RQT=309&VName=PQD

Gul, F., & Chia, Y. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: a test of a three-way interaction. Accounting, Organizations and Society, 19(4/5), 413-426.

Gumbus, A., Bellhouse, D., & Lyons, B. (2003). A three-year journey to organizational and financial health using the Balanced Scorecard: A case study at a Yale New Haven Health System Hospital. The Journal of Business and Economic Studies, 9(2), 54.

Gumbus, A., & Lyons, B. (2002). The Balanced Scorecard at Philips Electronics. Strategic Finance, 84(Issue 5), 45.

Gummesson, E. (1998). Productivity, quality and relationship marketing in service operations. 10(1), 4. Retrieved from http://proquest.umi.com/pqdweb?did=117542321&Fmt=7&clientId=13713&RQT=309&VName=PQD

Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. Academy of Management Journal, 25-41.

Gupta, G., & Salter, S. (2018). The Balanced Scorecard beyond Adoption. Journal of International Accounting Research, 17(3), 115-134.

Gurd, B., & Gao, T. (2008). Lives in the balance: an analysis of the balanced scorecard (BSC) in healthcare organizations. International Journal of Productivity and Performance Management, 57(1), 6-21.

Haka, S. (1987). Capital budgeting techniques and firm specific contingencies: a correlational analysis. Accounting, Organizations and Society, 12(1), 31-48.

Hansen, A., & Mouritsen, J. (2005). Strategies and Organizational Problems: Constructing Corporate Value and Coherences in Balanced Scorecard Processes. In Controlling Strategy: Management, Accounting and Performance Measurement (pp. 125-150). New York: Oxford University Press: C. S. Chapman (Ed.).

Hansen, D. R., & Mowen, M. M. (2005). Management Accounting Singapore: South-Western.

Hanson, J., & Towle, G. (2000). The Balanced Scorecard: Not just another Fad. Credit Union Executive Journal, 40(1), 12-16.

Hartmann, F. (2000). The appropriateness of RAPM: towards the further development of theory. Accounting, Organizations and Society, 25(4/5), 451-482.

Hepler, A., Anderson, B., Cooper, M., & Ogden, J. (2016). Keys to Successful Balanced Scorecard Implementation and Use Based on Published Implementation Attempts. Journal of Transportation Management, Summer/Fall, 7-19.

Hepworth, P. (1998). Weighing it up - a literature review for the balanced scorecard. The Journal of Management Development, 17(8), 559.

Hirst, M. K. (1981). Accounting information and the evaluation of subordinate performance: a situational approach. The Accounting Review, 56, 771-784.

Hirst, M. K. (1983). Reliance on accounting performance measures, task uncertainty and dysfunctional behaviour. Journal of Accounting Research, 21(2), 596-605.

Ho, S-J., & Chan, Y-C. (2002). Performance measurement and the implementation of balanced scorecards in municipal governments. The Journal of Government Financial Management, 51(4), 8.

Hopwood, A. (1972). An empirical study of the role of accounting data in performance evaluation. Journal of Accounting Research, 156-182.

Hopwood, A. G. (1974). Accounting and human behaviour. London: Accounting Age.

Hoque, M. & Moll., J. (2001). Public sector reform-Implications for accounting accountability and performance of state-owned entities –an Australian perspectives. The International Journal of Public Sector Management, 14(4), 304-326.

Hoque, Z. (2003). Strategic Management Accounting: Concepts, Processes and Issues: Spiro Press.

Hoque, Z. (2014). 20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. The British Accounting Review, 46, 33-59.

Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. Journal of Management Accounting Research, 12, 1-17.

Horngren, C. T., Foster, G., & Datar, S.M. (2000). Cost Accounting: a Managerial Emphasis. New Jersey: Prentice Hall Inc.

Horngren, C. T., Foster, G., & Datar, S.M. (2006). Cost Accounting: a Managerial Emphasis. New Jersey: Prentice Hall Inc.

Huckestein, D., & Duboff, R. (1999). Hilton Hotels: a comprehensive approach to delivering value for all stakeholders. Hotel and Restaurant Administration Quarterly (August).

Humphreys, K. A., & Trotman, K. T. (2011). The balanced scorecard: the effect of strategy information on performance evaluation judgments. Journal of Management Accounting Research, 23, 81–98.

Hyman, H. H. et al. (1954). Interviewing in social research. University of Chicago.

Imoisili, O. A. (1989). The role of budget data in the evaluation of managerial performance. Accounting, Organizations and Society, 14, 325-335.

Inamdar, N., & Kaplan, R. S. (2002). Applying the balanced scorecard in healthcare provider organizations. Journal of Healthcare Management, 47(3), 179-195. Retrieved from <Go to ISI>://000175685900008

Iselin, E. R., Mia, L., & Sands, J. (2004). The effects of the Balanced Scorecard and Related Systems on Organisational Performance. Working Paper, Griffith University.

Ittner, C. D., & Larcker, D. F. (1998). Innovations in performance measurement: Trends and research implications. Journal of Management Accounting Research, 10, 205.

Jackson, A., & Lapsley, I. (2003). The diffusion of accounting practices in the new "managerial" public sector. International Journal of Public Sector Management, 16(5), 359-372.

James, W., & Hoque, Z. (1997). Balancing the scorecard: Beyond the bottom line. Australian Accountant, 67(10), 46.

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. Administrative Science Quarterly, 24, 602-611.

Jones, C. S. (2002). The attitudes of British National Health Service managers and clinicians towards the introduction of benchmarking. Financial Accountability & Management, 18(2), 163–188.

Jones, C. S. & Dewing, I. P. (1997). The attitudes of NHS clinicians and medical managers towards changes in accounting controls. Financial Accountability & Management, 13(3), 261–280.

Kalendera, Z. T., & Vayvay, O. (2016). The Fifth Pillar of the Balanced Scorecard: Sustainability. Procedia - Social and Behavioral Sciences, 235, 76-83.

Kaplan, R. S., & Norton, D. P. (1992). The balanced Scorecard - Measures that drive performance. Harvard Business Review, 71-79.

Kaplan, R. S., & Norton, D. P. (1993). Putting the Balanced Scorecard to Work. Harvard Business Review, 134-147.

Kaplan, R. S., & Norton, D. P. (1996a). The balanced scorecard: translating strategy into action. Boston, Mass.: Harvard Business School Press.

Kaplan, R. S., & Norton, D. P. (1996b). Strategic learning & the balanced scorecard. 24(Issue 5), 18.

Kaplan, R. S., & Norton, D. P. (1996c). Using the Balanced Scorecard as a Strategic Management System. Harvard Business Review, 74(Issue 1), 75-85.

Kaplan, R. S., & Norton, D. P. (2001a). Transforming the balanced scorecard from performance measurement to strategic management: Part I. Accounting Horizons, 15(1), 87-104.

Kaplan, R. S., & Norton, D. P. (2001b). Transforming the balanced scorecard from performance measurement to strategic management: Part II. Accounting Horizons, 15(2), 147-160.

Kaplan, R. S., & Norton, D. P. (2001c). The strategy-focused organization: how balanced scorecard companies thrive in the new business environment. Boston: Harvard Business School Press,

Kaplan, R. S., & Norton, D. P. (2004). The strategy map: guide to aligning intangible assets. Strategy & Leadership, 32(5), 10-17.

Kaplan, R. S., & Norton, D. P. (2006). Alignment: Using the Balanced Scorecard to Create Corporate Synergies. Cambridge: Harvard Business Review.

Kaplan, R. S., Norton, D. P., & Rugelsjoen, B. (2010). Managing Alliances with the Balanced Scorecard. Cambridge: Harvard Business Review.

Kaplan, R. S., & Norton, D. P. (2016). The Execution Premium: Linking Strategy to Operations for Competitive Advantage. Boston: Harvard Business School Press,

Kariozen, W., (2012) The Influence of Balanced Scorecard Implementation on the Value of Oil Company – The Case of Mobil Corporation. Interdisciplinary Research, 42-45

Kastberg, G., & Siverbo, S. (2013). The Design and Use of Management Accounting Systems in Process Oriented Health Care – An Explorative Study. Financial Accountability & Management, 29(3), 246-270.

Kasurinen, T. (2002). Exploring management accounting change: the case of balanced scorecard implementation. Management Accounting Research, 13(3), 323–343.

Kavanagh, M. (2002). Model of the effects of Individual Values, Organisational Culture and Method of Acculturation on Merger Outcome. PhD University of Queensland.

Keyt, J. C. (2001). Beyond strategic control: Applying the balanced scorecard to a religious organization. Journal of Nonprofit & Public Sector Marketing, 8(4), 91.

Khandwalla, P. (1972). The effects of different types of competition on the use of management controls. Journal of Accounting Research, Autumn, 275-285.

Khandwalla, P. (1977). Design of Organizations. New York: Harcourt Brace Jovanovich.

Kidwell, L. A., Ho, S. K., Blake, J., Wraith, P., Roubi, R., and Richardson, A. W. (2002). New Management Techniques: An International Comparison. The CPA Journal (Feb.), 63-66.

Kim, K. K. (1988). Organizational coordination and performance in hospital accounting information systems: an empirical investigation. The Accounting Review, 63(3), 472–489.

Kim, R., Gaukler, G., & Lee, C-W. (2016). Improving healthcare quality: A technological and managerial innovation perspective. Technological Forecasting and Social Change, 113(B), 373-378.

Kloot, L. (1999). Performance measurement and accountability in Victorian local government. The International Journal of Public Sector Management, 12(7), 565.

Kloot, L., & Martin, J. (2000). Strategic performance management: A balanced approach to performance management issues in local government. Management Accounting Research, 11(2), 231.

Knutsson, H., Mattosson, O., Ramberg, U., & Tagesson, T. (2008). Do strategy and management matter in municipal organizations? Financial Accountability & Management, 24(3), 295-319.

Kotter, J. (1996). Leading Change. Boston: Harvard Business School Press.

Kren, L., & Liao, W. M. (1988). The role of accounting information in the control of organizations: a review of the evidence. Journal of Accounting Literature, 7, 280–309.

Krumwiede, K. R. (1998). The implementation stages of activity-based costing and the impact of contextual and organizational factors. Journal of Management Accounting Research, 10, 239-277.

Kubiak, T. (2003). An Integrated Approach System. Quality Progress, 36(7), 41-45.

Kunz, H., & Schaaf, T. (2011). General and specific formalization approach for a Balanced Scorecard: An expert system with application in health care. Expert Systems with Applications, 38, 1947-1955.

Kurunmäki, L. (1999). Professional vs financial capital in the field of health care—struggles for the redistribution of power and control. Accounting, Organizations and Society, 24(2), 95-124.

Kurunmäki, L., Lapsley, I., Melia, K. (2003). Accountingization v. legitimation: a comparative study of the use of accounting information in intensive care. Management Accounting Research, 14(2), 112-139.

Kurunmäki, L. & Miller, P. (2006). Modernising Government: The Calculating Self, Hybridisation and Performance Measurement. Financial Accountability & Management, 22(1), 87-106.

Kvale, S. (1996). Interviews: An Introduction to Qualitative Research Interviewing. Thousand Oaks, Sage Publications

Kwon, T., & Zmud, R. (1987). Unifying the Fragmented Models of Information Systems Implementation. In R. Boland, and Hirscheim, R. (Ed.), Critical Issues in Information Systems Research, 227-251. New York: John Wiley.

Lacey, D. (2008). Public Sector Performance Reporting as a Legitimizing Device. Conference Paper 5th International Conference on Accounting, Auditing and Management in Public Sector reforms. EIASM

Lacey, D., Cuganesan, S, Goode, S & Jacobs, K (2012). Celebrating adversity: inter-organisational dependence and public sector performance reporting in the Australian Federal Police. Public Administration, 90(2), 393-411.

Landrum, L. B. & Baker., S. L. (2004). Managing complex systems: performance management in public health. Journal of Public Health Management and Practice, 10(1), 13-18.

Lang, S. S. (2004). Balanced Scorecard and Government Entities. The CPA Journal (June), 48-52.

Langfield-Smith, K. (1997). Management control systems and strategy: a critical review. Accounting, Organizations and Society, 22(2), 207-232.

Langfield-Smith, K., Thorne, H. & Hilton, R.W. (2006). Management Accounting: An Australian Perspective McGraw-Hill.

Lapsley, I. (1991). Accounting research in the National Health Service. Financial Accountability & Management, 10(1), 13-18.

Lapsley, I. (1996). Health care reforms: solutions or problems? Financial Accountability & Management, 12(2), 83-87.

Lapsley, I., & Wright, E. (2004). The diffusion of management accounting innovations in the public sector: a research agenda. Management Accounting Research, 15, 355-374.

Larcker, D. F. (1981). The importance of selected information characteristics and strategic capital budgeting decisions. The Accounting Review, July, 519-538.

Larcker, D. F. (1983). The association between performance plan adoption and corporate capital investment. Journal of Accounting and Economics, 5, 3-30.

Lawrence, K., & Moore, S. (1994). Physicians heal themselves. National Review. 46 (18), 52-54.

Lawson, R., Stratton, W. & Hatch, T. (2003) The Benefits of a Scorecard System. CMA Management 24-26.

Lawton, R. (2002). Balance your balanced scorecard - Categories of measures should reflect key values of both organizations and customers. Quality Progress, 35(3), 66-71. Retrieved from <Go to ISI>://000174378800031

Lee, C-L., & Yang, H-J. (2011). Organization structure, competition and performance measurement systems and their joint effects on performance. Management Accounting Research, 22, 84-104.

Liberatore, M. J., & Miller, T. (1998). A Framework for Integrating Activity-based Costing and The Balanced Scorecard into The Logistics Strategy Development and Monitoring Process. Journal of Business Logistics, 19(Issue 2), 131.

Lillis, A. M. (1999). A framework for the analysis of interview data from multiple field research sites. Accounting and Finance, 39(1), 79-105.

Lin, Z., Yu, Z., & Zhang, L. (2014). Performance outcomes of balanced scorecard application in hospital administration in China. China Economic Review, 30, 1-15.

Lindsay, R. M. (1995). Reconsider the status of tests of significance: an alternative criterion of adequacy. Accounting, Organizations and Society, 20(1), 35-53.

Lipe, M. G., & Salterio S.E. (2000). The balanced scorecard: Judgmental effects of common and unique performance measures. The Accounting Review, 75(3), 283-298.

Lipe, M. G., & Salterio S.E. (2002). A note on the judgmental effects of the balanced scorecard's information organization. Accounting, Organizations and Society, 27(6), 531.

Llewellyn, S. (1997). Purchasing power and polarized professionalism in British medicine Accounting, Auditing & Accountability Journal, 10(1), 31-59.

Llewellyn, S., & Northcott, D. (2005) The average hospital. Accounting, Organizations and Society, 30(6), 555-583.

Lueg, R., & Vu, L. (2015). Success factors in Balanced Scorecard implementations – A literature review. Management Revue, 26(4), 306-327.

Luo, C-M., Chang, H-F., & Su, C-H. (2012). 'Balanced Scorecard' as an operation-level strategic planning tool for service innovation. The Service Industries Journal, 32(12), 1937-1956.

Macdonald, M. (1998). Using the Balanced Scorecard to Align Strategy and Performance in Long Term Care. Healthcare Management Forum, 11(3), 33-38.

Macinati, M., & Anessi-Pessina, E. (2014). Management accounting use and financial performance in public health-care organisations. Evidence from the Italian National Health Service. Health Policy, 117(1).

Macintosh, N. B. (1981) A Contextual Model of Information Systems, Accounting, Organizations and Society, 6(1) 39-53.

Macintosh, N., & Daft, R. L. (1987). Management control systems and departmental interdependencies: an empirical study. Accounting, Organizations and Society, 12(1) 23–48.

Madsen, D. Ø. (2011). The impact of the balanced scorecard in the Scandinavian countries: a comparative study of three national management fashion markets. (no. 2011/13 Ph.D. Thesis), Norwegian School of Economics, Department of Strategy and Management, Bergen, Norway.

Madsen, D. Ø. (2012). The Balanced Scorecard i Norge: En studie av konseptets utviklingsforløp fra 1992 til 2011. Praktisk Økonomi og Finans(4), 55-66.

Madsen, D. O., & Stenheim, T. (2015). The Balanced Scorecard: A review of five research areas. American Journal of Management, 15 (2), 24-41.

Malina, M. A., & Selto F.H. (2001). Communicating and controlling strategy: An empirical study of the effectiveness of the balanced scorecard. Journal of Management Accounting Research, 13, 47-90.

Malmi, T. (1999). Activity-based costing diffusion across organisations: an exploratory empirical analysis of Finnish firms. Accounting, Organizations and Society, 24(8), 649-672.

Malmi, T. (2001), "Balanced Scorecards in Finnish Companies: A Research Note", Management Accounting Research, 12(2), pp. 207 - 220.

Malmi, T., Bedford, D., Brown, D., & Sivabalan P., (2008) Balanced Scorecard Design and Performance Impacts: Some Australian Evidence. Applied Management Accounting Research, 6(2), 17-36.

Marks, D.F., & Yardley, L. 2004 Content and Thematic Analysis. Research Methods for Clinical and Health Psychology. California, Sage, 56-68

Mata, F. J., Fuerst, W. L., & Barney, J. B. (1995). Information Technology and Sustained Competitive Advantage: A Resource-based Analysis. MIS Quarterly, 19(4), 487-505.

McAdam, R., & Walker, T. (2003). An Inquiry into Balanced Scorecards within Best Value Implementation in UK Local Government. Journal of Public Administration, 81(4), 873-893.

McCracken, M., McIlwain, T., & Fottler, M. (2001). Measuring organizational performance in the hospital industry: an exploratory comparison of objective and subjective methods. Health Services Management Research [NLM - MEDLINE], 14(4), 211.

McGowan, A. S. &. Klammer., T. P. (1997). Satisfaction with activity-based cost management implementation. Journal of Management Accounting Research, 9, 217-237.

Merchant, K. (1981). The design of the corporate budgeting system: influences on managerial behavior and performance. The Accounting Review, 4, 813-829.

Merchant, K. (1985). Budgeting and the propensity to create budgetary slack. Accounting, Organizations and Society, 10(2), 201-210.

Merchant, K., & Simons, R. (1986). Research and control in complex organizations: an overview. Journal of Accounting Literature, 5, 184–201.

Meyer, J. W. & Rowan, B. (1977) Institutional organizations: formal structure as myth and ceremony. American Journal of Sociology, 83, 340-63.

Mia, L., & Chenhall, R. H. (1994). The usefulness of management accounting systems, functional differentiation and managerial effectiveness. Accounting, Organizations and Society, 19(1), 1-13.

Mia, L. & Goyal, M. (1991). Span of control, task interdependence and usefulness of MAS information in not-for-profit government organizations. Financial Accountability & Management, 7(4), 249–266.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook (2nd ed.). Sage Publications, Inc.

Miles, R. W., & Snow, C. C. (1978). Organizational strategy, structure and process. New York: McGraw Hill.

Mishler, E.G. (1986). Research Interviewing: Context and Narrative. Cambridge, MA. Harvard University Press.

Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. Strategic Management Journal, 1-25.

Miville, N. D. (2005). Factors influencing the diffusion of innovation and managerial adoption of new technology. Retrieved from https://search-proquest-com.ezproxy.usq.edu.au/docview/305349728?accountid=14647

Modell, S. (2004). Performance measurement myths in the public sector: a research note. Financial Accountability & Management, 20(1), 39-55.

Modell, S. (2012). The politics of the balanced scorecard. Journal of Accounting & Organizational Change, 8(4), 475-489.

Modell, S. & Lee, A. (2001). Decentralization and reliance on the accountability principles in the public sector. Financial Accountability & Management, 17(3), 191–218.

Mooraj, S., Oyon, D., & Hostettler, D. (1999). The Balanced Scorecard: A necessary good or an unnecessary evil? European Management Journal, 17(5), 481.

Moore, G. C. & Benbasat., I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. Information Systems Research, 2(3), 192-222.

Moore, G. C. & Benbasat., I. (1996). Integrating diffusion of innovations and theory of reasoned action models to predict utilization of information technology by end-users. In K. Kautz. & J. Pries-Heje (Ed.), Diffusion and adoption of information technology (pp. 132-146): Chapman and Hall.

Moores, K., & Sharma, D. (1998). The influence of environmental uncertainty on performance evaluation style and managerial performance. Accountability and Performance, 4(2), 1-16.

Mucciarone, M., & Neilson, J. (2008). Accountability and performance measurement in Australian and Malaysian government departments. (PhD), Curtin,

Naukowa, R., Raczyńska, M., Krukowski, K., & Siemiński, M. (2015). Managing public organizations in theory and practice. Research Gate. Retrieved from https://www.researchgate.net/publication/313510678_The_balanced_scorecard_in_the_public_sector_organization?enrichId=rgreq-93a44b91f1345c0e91ffa68d45349cd3-XXXPdf.

Niven, P. R. (2002). Balanced scorecard step-by-step: maximizing performance and maintaining results. New York: Wiley.

Niven, P. R. (2008). Balanced Scorecard: Step by step for Government and Nonprofit Agencies: Wiley.

Nørreklit, H. (2000). The balance on the balanced scorecard - A critical analysis of some of its assumptions. Management Accounting Research, 11(1), 65.

Nørreklit, H. (2003). The balanced scorecard: what is the score? A rhetorical analysis of the balanced scorecard. Accounting, Organizations and Society, 28(6), 591–619.

Nørreklit, H., Nørreklit, L., Mitchell, F., & Bjørnenak, T. (2012). The rise of the balanced scorecard! Relevance regained? Journal of Accounting & Organizational Change, 8(4), 490-510.

Nørreklit, H., & Mitchell, F. (2014). Contemporary Issues on the Balanced Scorecard. Journal of Accounting and Organizational Change, 10 (4).

Northcott, D., & Taulapapa, T. (2012). Using the balanced scorecard to manage performance in public sector organizations. International Journal of Public Sector Management, 25(3), 166-191.

Nyland, K. & Pettersen, I. J. (2004). The control gap: the role of budgets, accounting information and (non-) decisions in hospital settings. Financial Accountability & Management, 20(1), 77–102.

Oliveira, J. (2001). The balanced scorecard: An integrative approach to performance evaluation. Healthcare Financial Management, 55(5), 42.

Olson, E. M., & Slater, S. F. (2002). The balanced scorecard, competitive strategy, and performance. Business Horizons, 45(3), 11-16.

Olve, N. G., Roy, J., & Wetter, M. (1999). Performance Drivers: a Practical Guide to Using the Balanced Scorecard. New York: John Wiley and Sons.

Otley, D. T. (1978). Budget use and managerial performance. Journal of Accounting Research, 16(1), 122-149.

Otley, D. T. (1980). The contingency theory of management accounting: achievement and prognosis. Accounting Organizations and Society, 4, 413-428.

Otley, D. T., & Wilkinson, C. (1988). Organizational behaviour: strategy, structure, environment and technology. In K. R. Ferris (Ed.), Behavioural accounting research: a critical analysis (pp. 147-170). New York: Century Publications Co.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. Management Accounting Research, 31,45–62.

Papalexandris, A., Ioannou, G., & Prastacos, G. P. (2004). Implementing the Balanced Scorecard in Greece: a Software Firm's Experience. Long Range Planning, 37, 351-366.

Parmenter, D. (2002). The balanced scorecard: Up and running in 16 weeks. New Zealand Management, 49(4), 56.

Pasaribua, A., Andika, M.G.D., Rachmanda, R., & Wibisono, D. (2016). A review of performance management using the balanced scorecard in public sector. Asia Pacific Institute of Advanced Research (APIAR), 1-11.

Patel, B., Chaussalet, T., & Millard P. (2008). Balancing the NHS balanced scorecard! European Journal of Operational Research, 185, 905 - 914.

Patel, V., Ashrafian, H., Ahmed, K., Arora, S., Jiwan, S., Nicholson, J., Darzi, A., & Athanasiou, T. (2011). How has Healthcare Research Performance been Assessed? A Systematic Review. Journal of the Royal Society of Medicine, 104, 251-261.

Patton, M. Q. (1990). Qualitative Evaluation & Research Methods. Newbury Park: Sage Publications.

Pelz, D. C. (1985). Innovation complexity and the sequence of innovating stages. Knowledge: Creation, Diffusion, Utilization, 6(3), 261-291.

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(6), 557-572.

Perera, S., McKinnon, J. L., & Harrison, G. L. (2003). Diffusion of transfer pricing innovation in the context of commercialisation: a longitudinal case study of Government Trading Enterprise. Management Accounting Research, 14(2), 140-164.

Perkins, M., Grey, A., & Remmers, H. (2014). What do we really mean by “Balanced Scorecard”? International Journal of Productivity and Performance Management, 63(2), 148-169.

Perrow, C. (1970). Organizational analysis: a sociological view. California: Wadsworth Publishing Company.

Phillips, J. K. (2004). An Application of the Balanced Scorecard to Public Transit System Performance Assessment. Transportation Journal, 43(1), 26-54.

Pieper, S., K. (2005). Reading the Right SIGNALS: How to Strategically Manage with Scorecards. 20(3), 8. Retrieved from http://proquest.umi.com/pqdweb?did=827293651&Fmt=7&clientId=13713&RQT=309&VName=PQD

Pineno, C. J. (2002). The balanced scorecard: An incremental approach model to health care management. Journal of Health Care Finance, 28(4), 69.

Pink, G. H., McKillop, I., Schraa, E., & Preyra, C. (2001). Creating a balanced scorecard for a hospital system. Journal of Health Care Finance, 27(3), 1.

Polit D.F, & Hungler B.P. (1995). Nursing Research, Principles and methods, Philadelphia PA, JB Lippincott.

Porebski, D. (2013). Efficiency and practical aspects of the balanced scorecard in polish specialistic hospital International Journal of Business and Management Studies, 2(2), 523-534.

Porter, M. (1980). Competitive strategy. New York: The Free Press.

Premkumar, G., & Potter, M. (1995). Adoption of Computer-Aided Software Engineering (Case) Technology - an Innovation Adoption Perspective. Data Base for Advances in Information Systems, 26(2-3), 105-124. Retrieved from <Go to ISI>://A1995TB34400009

Prescott, M. B., & Conger, S. A. (1995). Information Technology Innovations - a Classification by It Locus of Impact and Research Approach. Data Base for Advances in Information Systems, 26(2-3), 20-41. Retrieved from <Go to ISI>://A1995TB34400005

Preston, A. M. (1992). The birth of clinical accounting: a study of the emergence and transformation of discourses on costs and practices of accounting in U.S. hospitals. Accounting, Organizations and Society, 17(1), 63-100.

Preston, A. M., Chua, W-F., Neu, D. (1997). The Diagnosis-Related Group-Prospective Payment System and the problem of the government of rationing health care to the elderly, Accounting, Organizations and Society, 22(2), 147-164.

Preston, C. (2002). The Balancing Act. CMA Management, 75(10), 28-31.

Qu, S. Q., Cooper, D. J. (2011). The role of inscriptions in producing a balanced scorecard. Accounting, Organizations and Society, 36(6), 344-362.

Radnor, Z., & Lovell, B. (2003a). Defining, justifying and implementing the Balanced Scorecard in the National Health Service. International Journal of Medical Marketing, 3(3), 174.

Radnor, Z., & Lovell, B. (2003b). Success factors for implementation of the balanced scorecard in a NHS multi-agency setting. International Journal of Health Care Quality Assurance, 16(2/3), 99.

Reed, R., & DeFillippi, R. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. Academy of Management Review, 15, 88-102.

Rigby, D. (2001). Management tools and techniques: A survey. California Management Review, 43(2), 139-+. Retrieved from <Go to ISI>://000168212800007

Rigby, D., & Bilodeau, B. (2007). Bain's Global 2007 management tools and trends survey. Strategy and Leadership, 35 (5), 9-16.

Rigby, D., & Bilodeau, B. (2015). Management tools and trends survey 2015. Bain & Company. https://www.bain.com/insights/management-tools-and-trends-2015/

Roberts, E. S. (1999). In Defence of the Survey Method: An Illustration from a Study of User Information Satisfaction. Accounting and Finance, 39, 53-77.

Rodgers, M. C. (2011). Organizational critical success factors influencing balanced scorecard systems in UK healthcare. Journal of Management & Marketing in Healthcare, 4(3), 174-179.

Roest, P. (1997). The golden rules for implementing the balanced business scorecard. Information Management & Computer Security, 5, 163-165.

Rogers, E. M. (1983). Diffusion of Innovations. New York: The Free Press.

Rogers, E. M. (1995). Diffusion of Innovations (2nd ed.). New York: The Free Press.

Ross, A. (1995). Job related tension, budget emphasis and uncertainty. Management Accounting Research, 6, 1-11.

Ross, J. W., Beath C. M., & Goodhue, D. L. (1996). Develop Long-term Competitiveness Through IT Assets. Sloan Management Review, 38(1), 31-45.

Rousseau, Y., & Rousseau, P. (2000). Turning strategy into action in financial services. CMA Management, 73(10), 25-29.

Rubin, H.J. (1995). Qualitative Interviewing: the art of hearing data. Thousand Oaks, Sage Publications.

Ryan, B., Scapens, R.W., & Theobold, M. (1992). Research Method and Methodology in Finance and Accounting. London. Academic Press.

Salterio, S. (2012). Balancing the scorecard through academic accounting research: opportunity lost? Journal of Accounting & Organizational Change, 8(4), 458-474.

Samir, H., Fantino, B., Germain, C., & Beauchet, O. (2014). P423: How to compare the performance of three European long term care systems by using the Balanced Scorecard framework. European Geriatric Medicine, 5(1), 215.

Samuel, S., Dirsmith, M. W., & McElroy, B. (2005). Monetized medicine: from the physical to the fiscal. Accounting, Organizations and Society, 30(3), 249-278.

Scapens, R., & Bromwich, M. (2010). Management Accounting Research: 20 years on. Management Accounting Research, 21(4), 278-284.

Schulz, A.K. (1999). Experimental research method in a management accounting context. Accounting and Finance 39(1) 29-52

Seidman, I. E. (1998). Interviewing as qualitative research: A guide for researchers in education and the social sciences (2nd ed.) New York, Teachers College Press.

Shepherd, N. A. (2002). Integrating cost of quality into performance improvement plans. How to align and integrate with a balanced scorecard. Quality Congress. ASQ's ... Annual Quality Congress Proceedings, 337-342.

Shields, M. D., & Young, S. M. (1994). Managing innovation costs: A study of cost consciousness behavior by R&D professionals. Journal of Management Accounting Research., 6, 175.

Shields, M. D. (1995). An empirical analysis of firms' implementation experiences with activity-based costing. Journal of Management Accounting Research, 7, 148-166.

Shields, M. D., Deng, F. J., & Kato, Y. (2000). The design and effects of control systems: tests of direct and indirect-effects models. Accounting, Organizations and Society, 25(2), 185-202.

Shukri, N. F. M., & Ramli, A. (2015). Organizational Structure and Performances of Responsible Malaysian Healthcare Providers: A Balanced Scorecard Perspective. Procedia Economics and Finance, 28, 202-212.

Sieber. (1973). The integration of fieldwork and survey methods. American Journal of Sociology, 78(6), 1335-1359.

Silva, B.F., & Prochnik, V., (2005). Seven Challenges for the Implementation of Balanced Scorecard in Hospitals. Presented at the 3rd Conference on Performance Measurement and Management Control, Nice, September 22-23, 2005

Simon, H.A. (1957). Administrative Behaviour: a Study of Decision-Making Processes in Administrative Organization, 2nd Ed, Free Press.

Simons, R. (1987). Accounting control systems and business strategy: an empirical analysis. Accounting, Organizations and Society, 12, 357-374.

Simons, R. (1995). Levers of control. Boston: Harvard University Press.

Simons, R., 2000. Performance Measurement and Control Systems for Implementing Strategy. Prentice-Hall, Upper Saddle River.

Singh, R., & Sethi, S. (2017). The Balanced Scorecard: Churning the Existing Literature. Amity Global Business Review, 20-31.

Smith, K. J. (1993). Investment monitoring systems, abandonment of capital assets and firm performance. Journal of Management Accounting Research, 5, 281-299.

Smith, M. (2000). Innovation Diffusion. Management Accounting, 40-41.

Smith, P. (2002). Performance Management in British health care: will it deliver? Health Affairs, 21(3), 103-115.

Soderberg, M., Kalagnanam, S., Sheehan, N. T., & Vaidyanathan, G. (2011). When is a balanced scorecard a balanced scorecard? International Journal of Productivity and Performance Management, 60 (7), 688-708.

Souder, W. E. &. Quaddus., A. (1982). A decision modelling approach to forecasting the diffusion of longwall mining technologies. Technological Forecasting and Social Change, 21, 1-14.

Spatar, D., Kok, O., Basoglu, N., & Daim T. (2019). Adoption factors of electronic health record systems. Technology in Society, 58, Article101144.

Speckbacher, G. S., Bischof, J., & Pfeiffer, T. (2003). A Descriptive Analysis of the Implementation of Balanced Scorecards in German speaking Countries. Management Accounting Research, 14 (4), 361-387.

Spekle, R., & Verbeeten, F. (2013). The use of performance measurement systems in the public sector: Effects on performance. Management Accounting Research, 1-16.

Steele, J. (2001). Transforming the balanced scorecard into your strategy execution system. Manage, 53(1), 22-23.

Steiner, G. (1978). The distribution of discourse, in Steiner, G. (Ed.), On difficulty and Other Essays. New York, Oxford University Press, 61-94.

Stivers, B. P., & Joyce, T. (2000). Building a Balanced Performance Management System. S.A.M. Advanced Management Journal, 65(Issue 2), 22.

Stewart, L.J., & Bestor, W.E. (2000). Applying a Balanced Scorecard to Health Care Organizations. Corporate Accounting & Finance, 11(3), 75-82.

Swan, J. A., & Newell, S. (1995). The role of professional associations in technology diffusion. Organisational Studies, 16 (5), 847-874.

Swanson, E. B. (1994). Information systems innovation among organisations. Management Science, 40, 1069-1092.

Szabo, S., & Sidor, J. (2014). The Performance Measurement System – Potentials and Barriers for Its Implementation in Healthcare Facilities. Journal of Applied Economic Sciences, IX (4(30)), 728-735.

Teece, D. J. (1980). The diffusion of an administrative innovation. Management Science, 26, 464-470.

Thompson, J. (1967). Organizations in Action. New York, McGraw-Hill.

Thompson, J. D. & Tuden, A. (1959). Strategies, structures and processes of organizational decision. In: J. D. Thompson (Ed.), Comparative Studies in Administration. Pittsburgh: The University of Pittsburgh Press.

Timoshenko, K. and Adhikari, P. (2009), "Exploring Russian central government accounting in its context", Journal of Accounting & Organizational Change, Vol. 5 No. 4, pp. 490-513.

Tornatzky, L. G. & Klein, J. K. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. IEEE Transactions on engineering management, 29(1), 28-45.

van der Meer-Kooistra, J. & Vosselman, G. (2004). The Balanced Scorecard: Adoption and Application. Advances in Management Accounting, 12, 287-310.

Van der Stede, W. A. (2000). The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation. Accounting, Organizations and Society, 25(6), 609-622.

Van Nguyen, H., & Brooks, A. (1997). An Empirical Investigation of Adoption Issues Relating to Activity-Based Costing. Asian Accounting Review, 5(1), 1-18.

Van Peursem, K. A., Pratt, M. J. & Lawrence, S. R. (1995). Health management Performance: a review of measures and indicators. Accounting, Auditing & Accountability Journal, 8(5), 34-70.

van Veen-Dirks, P., & Lillis, A. (2018). Do the Motives for Adoption of the Balanced Scorecard Affect its Development and Use? In M. Epstein, Verbeeten, F. and Widener, S. (Ed.), Performance Measurement and Management Control: The Relevance of Performance Measurement and Management Control Research (Vol. 33, pp. 15-37): Emerald Publishing.

Vaz Lopes, A., Kniess, C., & Ramos, H. (2015). Factors That Influence the Adoption of Balanced Scorecard (BSC) on a Cooperative Agro Industry: A Study Based on Innovation Diffusion Theory. Revista Ibero-Americana de Estratégia - RIAE, 14(3), 131-145.

Voelker, K. E., Rakich, J. S., & French, G. R. (2001). The Balanced Scorecard in Healthcare Organizations: A Performance Measurement and Strategic Planning Methodology. Hospital Topics: Research and Perspectives on Healthcare, 79(3), 13-24.

Waterhouse, J., & Tiessen, P. (1978). A contingency framework for management accounting systems research. Accounting, Organizations and Society, 3(1), 65–76.

Wefers, M. (2000). Strategic enterprise management by balanced scorecard based on IT. Wirtschaftsinformatik, 42(2), 123-+. Retrieved from <Go to ISI>://000086670700003

Wicks, A. M., St. Clair, L., & Kinney, C. S. (2007). Competing values in healthcare: balancing the (un)balanced scorecard. Journal of Healthcare Management, 52(5), 309-325.

Wilson, C., Hagarty, D., & Gauthier, J. (2003). Results using the balanced scorecard in the public sector. Journal of Corporate Real Estate, 6(1), 53-63.

Wolfe, R. A. (1994). Organizational Innovation - Review, Critique and Suggested Research Directions. Journal of Management Studies, 31(3), 405-431. Retrieved from <Go to ISI>://A1994NQ74100005

Wu, I-L. & Chang., C-H. (2011). Using the balanced scorecard in assessing the performance of e-SCM diffusion: A multi-stage perspective. Decision Support Systems, 52, 474-485.

Wyatt, J. (2004). scorecards, dashboards, and KPIs keys to integrated performance measurement. Healthcare Financial Management, 58(2), 76.

Yang, M-C. & Tung., Y-C. (2006). Using Path Analysis to Examine Causal Relationships Among Balanced Scorecard Performance Indicators for General Hospitals: The Case of a Public Hospital System in Taiwan. Health Care Management Review, 31(4), 280-288.

Yap, C., Siu, E., Baker, G. R., Brown, A., D., & Lowi-Young, M., P., (2005). A Comparison of Systemwide and Hospital-Specific Performance Measurement Tools/PRACTITIONER APPLICATION. 50(4), 251. Retrieved from http://proquest.umi.com/pqdweb?did=874983301&Fmt=7&clientId=13713&RQT=309&VName=PQD

Yin, R.K. (1989). Case Study Research, Design and Methods. Beverley Hills Sage Publications.

Young, S. M., & Selto, F. H. (1991). New manufacturing practices and cost management: A review of the literature and directions for research. Journal of Accounting Literature, 10(10), 165-298.

Yuen, P., & Ng, A.W. (2012). Towards a balanced performance measurement system in a public health care organization. International Journal of Health Care Quality Assurance, 25(5), 421-430.

Zagotta, R., & Robinson, D. (2002). Keys to successful strategy execution. Journal of Business Strategy, 30-34.

Zaman, F., & Yoon, D-Y. (2016). Factors that Affect Performance Measurement Systems: A Critical Review. Asia-Pacific Management Accounting Journal, 11(2): 79-106.

Zastempowski, M. (2015). The balanced scorecard in the public sector organization. In K. K. Magdalena Raczyńska, Marek Siemiński (Ed.), Managing public organizations in theory and practice: Wydawnictwo Uniwersytetu Warmińsko-Mazurskiego.

Zelman, W., Pink, G. H., & Matthias, C. (2003). Use of the balanced scorecard in health care. Journal of Health Care Finance, 29(4): 1.

Zizlavsky, O. (2014). The Balanced Scorecard: Innovative Performance Measurement and Management Control System. Journal of Technology Management & Innovation, 9(3): 210-222.

APPENDIX A: INFORMATION SHEET & CONSENT FORM

FACTORS THAT AFFECT THE ADOPTION OF THE BALANCED SCORECARD AND THE FORM THE BSC HAS ASSUMED WITHIN AUSTRALIAN ORGANISATIONS.

INFORMATION SHEET

This research is being conducted by a PhD student from Griffith Business School supervised by the following staff members:

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Why this research is being conducted

The purpose of this empirical research is to gain a better understanding of the factors that affect the adoption of the Balanced Scorecard (BSC) and the form that it takes. We hope to gain insight into: those factors that affect the potential adopters choose of the BSC or not; and a better understanding of the form/content the balanced scorecards have assumed in organisations; and whether either the choice to adopt or the form it takes is influenced by industrial settings or sectors.

The basis by which you have be selected.

In order to collect useful information, we need to talk to a number of employees within different organisations throughout Queensland. You have been selected to participate in this research project. Your participation is sought as you have been identified as having the necessary background information for our research. That is, you have been a part of a team that has chosen to adopt or evaluate the BSC.

What you will be asked to do

You are asked to be involved in an initial interview anticipated to be approximately an hour in length. At a later date you will be asked to verify the transcription of the interview and be given the opportunity to add or retract information if you desire.

Your participation is voluntary

Your participation in this process is entirely voluntary and you may withdraw from it at any time. If at any point before, during or after the interview you decide you do not wish to participate, the interview will be cancelled and any interview recording, or transcript will be destroyed.

The expected benefits of the research

This research is expected to contribute to scientific knowledge about the adoption of the Balanced Scorecard and the form BSC have taken in Australian organisations. It is also anticipated that this information could be useful to practitioners who are either anticipating adopting the BSC or are unsure about the form their BSC should take.

Risks to you

No risks have been identified with your participation in this research.

Your confidentiality

In order to produce accurate information, the interviews will be recorded by audio tape and a digital voice recorder. References to individuals will be kept completely anonymous and recordings only used for accurate transcription and analysis purposes. Reports on the research findings will include only summary information. No data or material that could be used to identify any individual or organisation will be published or released, and access to individual interview transcripts will be restricted to the researchers at the Griffith Business School and kept in a locked secure location. All recordings will be erased no later than five years after the interview. Any comments stated to be 'confidential' by the interviewee will be treated as 'confidential', and not disclosed to any other person or used in the study.

Questions / further information

You can contact any member of the above-mentioned research team, on the contact information provided, for any additional information you may require about the project.

The ethical conduct of this research

Griffith University conducts research in accordance with the *National Statement on Ethical Conduct in Research Involving Humans.* If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on 3875 5585 or research-ethics@griffith.edu.au .

Feedback to you

If you would like to see a summary of the findings from this study, please provide your contact details to the student researcher above. You will be advised by email once the research summary is complete. Requesting a summary of these findings will not indicate to us that you have participated in the research process due to the anonymity afforded to participants and the general nature of this communication.

Privacy Statement

The conduct of this research involves the collection, access and/ or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University's Privacy Plan at www.griffith.edu.au/ua/aa/vc/pp or telephone (07) 3875 5585.

Consent Form

If you agree to being involved in this study, please sign the attached content form and return to the student contact listed above.

FACTORS THAT AFFECT THE ADOPTION OF THE BALANCED SCORECARD AND THE FORM THE BSC HAS ASSUMED WITHIN AUSTRALIAN ORGANISATIONS.

CONSENT FORM

Research Team:

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By signing below, I confirm that I have read and understood the information package and in particular have noted that:

- I understand that my involvement in this research will include an interview of approximately an hour;
- I have had any questions answered to my satisfaction;
- I understand the risks involved;
- I understand that there will be no direct benefit to me from my participation in this research;
- I understand that my participation in this research is voluntary;
- I understand that if I have any additional questions, I can contact the research team;
- I understand that I am free to withdraw at any time, without comment or penalty;
- I understand that I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee on 3875 5585 (or research-ethics@griffith.edu.au) if I have any concerns about the ethical conduct of the project; and
- I agree to participate in the project.

Participant Name:

Signature:

Date:

Witness Name:

Signature:

Date:

APPENDIX B: INTERVIEW PROTOCOL

General Introduction:

The broad objective of this study is to further our understanding of the type of organisational situations where the balanced scorecard will work well and also what factors might cause an organisation to tailor the balanced scorecard in particular ways.

Issue: Understanding of a 'Balanced Performance Measurement System' (BPMS) and the term the 'balanced scorecard' (BSC)

Main Question:
Some academics and practitioners refer to this particular type of balanced performance measurement system (BPMS) as a Balanced Scorecard, have you heard of a BSC?

If yes:
How did you hear about it?
Would you describe for me your understanding of what a BSC is?

Note: This could potentially lead into the second objective rather than the first.

If no:
The following is a description of a BSC taken from the literature on the BSC.
"A Balanced Scorecard: measures an organization's performance from four key perspectives: financial, customer, internal business processes and learning and growth. The organisation's strategy influences the measures in each of these perspectives. The term "balanced" is used to emphasis the fact that organisations should include in their scorecard, both financial and non-financial measures, with lead and lag measures and a mix of objective and subjective measures."

Sub Question:
To what extent would you say your organisation has a well-balanced performance measurement system, such as I've just described? Could you expand on that, maybe by using examples?

Possible supplementary prompts:
As you feel that your organisation hasn't pursued a 'balanced' performance measurement system (PMS), could you explain why you believe this is the case?

Do you think there have been any problems or limitations because the PMS isn't sufficiently 'balanced', and if so, could you provide examples?

Pursue informally if their organisation might actually have measures in each of the key perspectives: Customer, Internal business process and learning and growth.

Also pursue whether there is a mixture of different types of measures used. [Could be achieved through asking for a copy of the performance measures they use (KPI's) if they are available]

Issue: Factors affecting the adoption choice

First Objective:
One of the objectives of this study is to identify any organisational, technological and environmental factors that impact on the adoption of a balanced performance measurement and management system (BSC).

RQ1:
As I related that objective to you, what were your thoughts about any factors that have impacted on the performance measurement system used in your organisation?

If not covered by the interviewee these points will be addressed directly:
What impact, if any, do you think the following have had on the adoption of the BPMS?

Top Management Support
Availability of someone to champion the introduction of a particular PMS
Consultants' involvement
Compatibility – Organisational /Strategic Business Unit structure
IT facilities
Perceived need - because of perceived problems, etc
Perceived relative advantage

Anything else that you think is relevant to this discussion?

Issue: Factors affecting the perceived relative advantage

Main Question:
The study also aims to identify any factors that have affected the perceived relative advantage of them having a balanced performance measurement system. What are your thoughts on this issue?

Sub Question:
Why do you think your organisation choose the BSC? Or
Why do you think your organisation has chosen not to develop a BSC?

If not already covered by the interviewee, these points will be addressed directly:

Interviewee's perceived relative advantages of having a ***balanced performance measurement system.***

Possible prompts:

- Compatibility with the organisation (structure/culture)
- Compatibility with strategic business unit
- Compatibility with & Quality of – IT/IS
- Adoption of other techniques/innovations e.g. VBM or TQM
- Uses of the PMS/BSC
- Roles of the PMS/BSC

Issue: Impact of healthcare sector and culture on BSC adoption or implementation process.

RQ2:

We also want to examine if and how industrial settings/sectors can affect the BSC adoption or implementation.

Main Question:
Could you outline the key features / factors about your industrial context and how this may have affected the PMS implemented?

Possible supplementary prompt question (to elaborate, if needed, on the previous question):

Do you feel this has affected either the content of your organisation/Strategic Business Unit BSC or the adoption process?

If not already covered by the interviewee these contingency dimensions may be addressed directly:

Environmental Uncertainty
Complexity / diversity of organisation or Strategic Business Unit
Strategy (may need to expand on this for some interviewees – refer appendix)

RQ3: Process of implementing and embedding the BSC.

RQ3a: What critical success factors affect the adoption of the BSC or the implementation process within a healthcare organisation?

RQ3b: What barriers affected the adoption of the BSC or the implementation process within a healthcare organisation?

Sub Question – How deep within the organisation has the BSC been rolled out?
To what extent have modifications been made to the BSC to facilitate the cascading, i.e., has the cascading impacted on Content/form of BSC?

Issue: Range of roles the BSC performs

Fourth Objective:

Lastly, we want to examine the range of roles performed by the performance measurement system/BSC in organisations.

RQ4:
What are/were the roles performed and implications arising when you "modified" your PMS/BCS or (KPI's if not balanced)?

Possible prompt (if struggling):
Were there any organisational impacts from the changes? For example, when you started measuring a certain aspect say 'patient satisfaction' was there a perceivable change either in this dimension of performance or another measure i.e. personnel behaviour change or an increase in reported patient satisfaction. It has been suggested that 'What gets measured gets managed'.

If not already covered by the interviewee these points may be addressed directly:
According to Kaplan and Norton and other authors of Management Accounting textbooks a range of roles or 'implications' are performed by the BSC – it is used as a measurement tool, a monitoring device, a management tool, a strategic management tool, a communication tool, a planning tool, a motivational tool or as a change mechanism. The BSC has also been used in various combinations of these roles.

Sub Question:
Please indicate the relative degree to which your PMS performs the following roles.

Possible Roles:

Department Performance Measurement
Managers Performance Measurement
Communication Tool
Resource allocation and co-ordination
Planning and forecasting
Motivation/Incentive schemes
Political
Attention directing
Change mechanism
Strategy
Any other roles that you can think of?

Sub Question:
As you make your choices on the scale, please explain the rationale behind your answer.

Thank you very much for your time and sharing your knowledge.

Descriptions of competitive strategies based on Miles and Snow (1978):

Defenders have a narrow product range, search little to new products, aggressively compete on price, quality and services, concentrate on product improvement, and rarely make major adjustments to their technology, structure or methods of operations. Their primary attention is on the efficiency of their operations.

Prospector-type organisations search continuously for new market opportunities and regularly experiment with possible new trends and innovations. They are "creators of change" and as such generally focus attention on product innovation and market opportunities, emphasising creativity over efficiency and maintaining flexibility.

Analyser or mixed strategy firms are those that operate in two types of product market domains. seems to incorporate both are "defender" and "prospector" type of organisation, in so much as the first area concentrates on being efficient and the second area concentrates on watching the competitors closely so as to determine the possibility of introducing new products or services as rapidly as possible.

The **reactor** is a residual strategy, arising when one of the other three strategies is improperly pursued; they appear to be aware of environmental uncertainty, but unable to respond effectively. This type of organisation, because it has no direct strategic direction, tends to make no adjustments until absolutely necessary by being forced to do so by environmental pressures.

Interview Protocol Appendix 1

Name of Participant:
Name of organisation/SBU:
Size:
Years with Organisation:
Position held:
Gender:

Interview Protocol Appendix 2

Could you please indicate on the scale provided the degree to which your prior modification of your PMS/BSC has had an impact on or implications with respect to, the following aspects of your organisational life?

	1	2	3	4	5
Degree of affect	**None**	**Small**	**Somewhat**	**Medium**	**Large**
Department Performance Measurement					
Managers Performance Measurement					
Communication Tool					
Resource allocation and co-ordination					
Planning and forecasting					
Motivation					
Incentive schemes					
Political					
Attention directing					
Change mechanism					
Strategy					
Please list any other roles that you can think of?					

APPENDIX C: PRIOR CONTINGENCY FACTORS

Overview of contingency factors appraised in the ABC & IS literatures and in this research.

Factors	ABC Literature	IS Literature	This Study
INDIVIDUAL			
Job tenure	A(+)	KZ(+)	
Cosmopolitanism		KZ(-) S(+)	
Education		KZ(+)	
Role involvement	A(+)	KZ(+)	
Disposition to change	A(+)		
Informal support	A(+)	P(+)	
Critical mass		P(+)	
Unit professionally orientated		S(+)	
ORGANISATIONAL			
Top management support	BR(0)	P(+)	**RQ1**
Champion	BR(+)	P(+)	**RQ1**
Specialisation		KZ(+)	
Centralisation	A(+) G(-)	KZ(+) P(+)	
Formalisation	G(+)	K(+)	
Vertical differentiation	G(+)		
Size	BG(0) B(+) C(+) VB(+) K(+) BR(+)	P(+) S(+)	**RQ1**
Informal network	A(-)	KZ(+) W(+) P(+)	
Training & investment	A(+)		**RQ3**
Subsidiary of MNC's	C(+)		
Fit		P(+)	**RQ3**
Consultants	A(+) BG(0) B(+) BR(+)		**RQ1**
Other firms adopting		P(+)	
Roles			**RQ4**
Change Process			**RQ4**
TECHNOLOGICAL			
Compatibility	B(+)	KZ(+) W(+)	**RQ1**
IT quality	K(0)		**RQ1**
Relative advantage	A(+) BR(+)	KZ(+) W(+) P(+)	**RQ1**
Complexity	A(+)	KZ(-/+) W	**RQ1**
Accuracy	A(+)		
Decision usefulness	K(+)		
Relevance to decision making	A(+)	W(+)	
Dominance of O.H.	BG(0) B(+) C(0) V(0) BR(0)		
Product line complexity	BG(0) C(-) V(+)		
Product diversity	B(+) C(-) V(0) K(+) BR(+)		
Trialability		W(+)	
Observability		W(+)	
Decreasing price		P(+)	
Large new application portfolio		S(+)	

APPENDIX C (cont'd)

Adoption Factors Considered in prior research and in this research (Cont'd)

Factors	ABC Literature	IS Literature	The Study
TASK RELATED			
Task uncertainty	A(-)	KZ	
Autonomy	A(-)	KZ(+)	
Responsibility			
Variety		KZ(+)	
Training		W(+)	
Quality Manag. implementation	K(0)		**RQ1**
Lean production	K(0)		
Job shop	K(0)		
ENVIRONMENT			
Heterogeneity		KZ(+)	
Uncertainty		KZ(+)	
Competition	BG(0) B(0) V(+)	KZ(+)	
Concentration			
Inter-organisational dependence		KZ(+)	
External communication	BG(0) B(+)	W(+) KZ(+)	**RQ2**
Strategy	G(-/+)		**RQ2**

Legend: A=Anderson (1995), B=Bjornenak (1997), BG=Booth and Giacobbe (1998), BR=Brown, et al. (2001), C=Clarke, et al. (1997), G=Gosselin (1997), K=Krumwiede (1998), KZ=Kwon and Zmud (1987), P=Prescott and Conger (1995), S=Swanson (1994), VB=Van Nguyen and Brooks (1997), W=Wolfe (1994). The symbols displayed in brackets after each study indicate the relationship found, as follows:

+ positive; **-** negative; 0 no relationship.

Note: The above table has been modified from Brown et al., 2001 p 35, 36

Note: The researcher has chosen the factors from the ABC and IT literature as these factors are acknowledged as being relevant in the BSC literature also.