



FACTORS SHAPING THE USE OF OUTCOME BASED PERFORMANCE MANAGEMENT SYSTEM IN CENTRAL STATE, AUSTRALIA

A Thesis submitted by

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Abstract

This study examined the factors shaping the use of outcome based performance management system (OBPM) in a state government organisation in Australia. This study developed a theoretical model that identified three internal factors (employee engagement, organisational culture and leadership/management commitment) influencing the use of OBPM. In examining these factors, this study relied on institutional theory focussing on the impact of three institutional pressures: coercive, normative and mimetic on the use of OBPM. The research methodology adopted for this research is a case study. The study was conducted at Case A which is the largest employer in Central State Government Directorate. The study used a qualitative approach to collect and analyse the empirical data. Data were collected from three primary sources: in-depth interviews; questionnaire and document.

This study found that factors such as leaders support, employees' know-how, performance management culture, technological advancement and social networks have positive impact on the use of OBPM in Case A. The study also identified factors that prevented OBPM from being fully useful such as silo culture, lack of shared understanding, weak evaluative and learning culture, dispersed OBPM IT system and lack of employee engagement: in strategic planning; development of KPIs and design of OBPM. It is concluded that sources of coercive isomorphic pressures potentially came from political leaders and central government, while normative pressures came from employee engagement and organisational culture. This study also concluded that the uncertain institutional environment, ongoing restructure and technological advancements were likely to exert mimetic pressures on the use of OBPM.

This study made significant contribution to performance management system literature and practice by empirically examining the factors shaping the use of OBPM in a state government agency. This study deepened our understanding of the institutional environment of Case A and how the specific coercive, normative and mimetic forces influenced the use of OBPM in the organisation. The assertions made within this study were based on a single case study. Further work is required to validate the findings and examine the additional factors exerting influence in the use of OBPM with larger samples.

Key Words: Outcome-based performance management, institutional theory, employee engagement, organisational culture, leadership and management commitment, political influence

Certification of Thesis

This Thesis is entirely the work of Shandya Nand except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Dr Veronica Hampson

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Abbreviations

OBPM	Outcome Based Performance Management
PMS	Performance Management System
PMSE	Performance Management System Effectiveness
KPI	Key Performance Indicators
NEAT	National Emergency Access Targets
NEST	National Elective Surgery Targets
3E's	Economy, Efficiency and Effectiveness
IOO	Inputs, Outputs and Outcomes
ABB	Activity Based Budgeting
ABC	Activity Based Costing
DG	Director General
AIHW	Australian Institute of Health and Welfare
ROGS	Report on Government Services
SWOT	Strength, Weakness, Opportunities and Threat
SMART	Specific, Measurable, Attainable, Realistic and Timely
WIC	Walk in Center
IT	Information Technology
ILG	Indonesian Local Government
EBA	Enterprise Bargaining Agreement
FMA	Financial Management Act
RP	Research Problem
RQ	Research Question

Chapter 1 Introduction

1.1 Background to the research

Over the past decades, governments worldwide have faced increasing pressure to improve the performance, productivity and produce results from their actions (Moullin, 2017, Teeroovengadam *et al.*, 2019). Driven by the new public management principles, governments around the world have implemented a number of reform programmes. A notable feature of such reforms is the use of performance management systems (PMSs). The use of PMS has become a widely accepted organisational practice in public sector organisations across the developing and developed countries. PMS is seen as a key element in improving government efficiency, performance, accountability and productivity (Lee, 2008; Hoque, 2008; Fryer *et al.*, 2009; Dormer and Gill, 2010; Sole and Schiuma, 2010; Sillanpaa, 2011; Tung *et al.*, 2011, Rkein and Andrew, 2012; Baird *et al.*, 2012; Hawke, 2012; Goh, 2012; Wilton, 2013; Suthewasinnon *et al.*, 2016; Rashid and Said, 2018).

However, despite the perceived benefits of PMSs, their usefulness have been questioned (Aguinis *et al.*, 2011; Canaway *et al.*, 2017; Ahenkan *et al.*, 2018). Prior studies have highlighted that public sector PMSs demonstrate a lack of effectiveness indicators with greater emphasis on description of inputs, activities and processes and relatively few output or outcomes measures (Holloway *et al.*, 2012, Akbar *et al.*, 2012). Similarly, Rkein and Andrew (2012) highlighted that the market-based performance management system are less effective in a socio-economic context that results in conformance-only approach to performance within fragmented and networked system.

These mixed findings suggested a paradox between the uptake of the PMS and its usefulness. Albeit, there has been widespread acceptance of PMS in the public sector, their usefulness is still under ambiguity. The PMS in the public sector does not operate in isolation and are frequently subject to influence by isomorphic pressures within its changing institutional environment. PMS also gets affected by the variety of internal and external factors confronting the public sector organisations. Hence there is a need to find out the factors shaping the use of PMS in the public sector. The aim of this study was to examine the critical factors shaping the use of outcome based performance management system (OBPM) in the Australian public sector. These shortcomings were analysed and interpreted in light of many factors shaping the design, implementation and use of PMSs.

There are various factors that influence and shape the use of OBPM in the public sector, yet their role in determining the use of OBPM in a state government in Australia is largely unexamined. The revealed weaknesses in the PMSs prompted the need to examine the critical factors shaping the use of OBPM in a state government agency in Australia. Whilst many studies have been conducted on

factors shaping PMS, these studies have focused primarily on the federal and local governments nationally and internationally (Hawke, 2012; Akbar *et al.*, 2012).. Therefore a study of internal factors of OBPM at a state government level may offer an improved understanding of key factors influencing the use of OBPM at this level. This may provide key implications for practitioners at state government level, assisting them in using their OBPM. Since previous studies failed to empirically examine the impact of the internal factors on the use of OBPM in a state government agency, a detailed investigation of these factors is conducted in the present study.

This study contributed to the literature by examining the internal factors shaping the use of OBPM in a state government, which is the second tier of government, sitting below the federal government in Australia. An extensive literature search was conducted to identify existing research on factors affecting the use of PMS in the public sector. Based on the recurrence and frequency in which these factors are reported throughout the literature reviewed, the three internal factors: leadership/management commitment, employee engagement and organisational culture were selected. Using institutional theory, this study examined the effect of these coercive, mimetic and normative factors influencing OBPM. These factors are discussed in detail section 1.2.

The primary objective of this study was to increase our understanding about key internal factors shaping the utilisation of OBPM in the public sector.

Thus the aim of this study was to investigate the impact of the internal factors on the use of OBPM in Case A.

In this context, following question represents one of the main challenges in the field of performance management in the public sector:

How do the internal factors shape the use of OBPM in Case A?

1.1.1 A Broad Conceptualisation of OBPM in the Public Sector

The presumption is that PMS is a modern invention, nonetheless, the records show that elements of performance measurement have been in use in public administration for quite a while (Greiling, 2005). The New York Bureau of Municipal Research first developed a budgetary system which was based on work-load measured shortly before the second world war. A performance-based budgeting was recommended by the Hoover-Commission in 1949. In the 1950s, performance management was

based on concept called alternative budgeting. Program outcome measures formed an integral part of performance measurement efforts required for planning-programming-budgeting (PPB) back in the 1960s (Heinrich, 2002). During the 1970s and 1980s, the Nixon administration's management-by-objective and zero-based budgeting were introduced, which were more internal and process focussed (Heinrich, 2002). According to Romzek and Dubnick (1987), these early approaches to performance measurement describes hierarchical accountability for inputs and legal accountability for processes. Performance management developed during the 1990s and is now an established aspect of public sector management (Fryer *et al.*, 2009).

Currently performance management is a fundamental aspect of new public management (Greiling, 2005) whereby governments around the world have embraced the idea of reinventing public sector through shifting away from the traditional bureaucratic management of public service and towards a more business-oriented approach (Durst and Newell, 1999; Deleon and Denhardt, 2000; and Denhardt and Denhardt, 2000). Public sector performance management is now seen as a tool for improving public budgeting entailing a transition from cash-based accounting to accrual-based accounting, move away from an input-oriented towards an output or outcome-oriented public budgeting and encompassing qualitative and quantitative output or outcome indicators to be included into the budget and planning process (Greiling, 2005). Nowadays, performance management in the public sector promotes a better reporting system by improving public accountability and providing greater transparency for the general public through value-for-money reporting, giving information about the quality of public services and performance data (Greiling, 2005).

1.1.2 Case A OBPM Model

The principles of the OBPM are embedded in Central State legislation through provisions of the *Financial Management Act, 1996* (FMA). Under the provisions of FMA, Central State Treasurer presents an Appropriation Bill to the Central State Parliament. The Bill articulates appropriation for a financial year and provides funding for the delivery of agency outputs in that year. The Central State Plan (Central State and Municipal Services, 2008) sets out the Government's priority areas for a particular policy focus. These priorities highlight key areas where improved outcomes are sought, articulates key directions, government actions and responds to new challenges.

For Case A, outcomes represent the provision of quality health care to the Central State community. Like any organisation, the success for Case A comes from strong performance and accountability for outcomes being delivered. In accordance with the OBPM model, outcomes are described as the results, impacts and consequences of actions by Case A on the Australian community. Case A's policy

outcome as described in the high-level strategic documents include delivery of “quality health care” (Central State and Municipal Services, 2008). Desired outcomes are the basis for Government action for which policy decisions are made concerning the outputs which Case A produces to achieve the desired outcomes.

The objectives of the Case A’s OBPM model include (Central State Chief Minister, Treasury and Economic Development, 2019):

- improve community outcomes and make sustainable improvements to community well-being;
- enhance government accountability and performance;
- strengthen the relationship and trust between government and the community;
- provide for more efficient and effective government operations; and
- guide continuous improvement and work towards enhanced government performance and accountability, rather than prescribe specific actions.

Under this Model, Case A specifies the outputs that it will deliver and describes the planned government policy outcomes to which the outputs will contribute. Outputs are described as the goods and services produced by Case A on behalf of the Government. These outputs are clearly linked to the government’s intended outcomes. Case A’s outputs are funded by government, through the Central State Government Budget process and produced using the Directorate’s expenses. Outputs are grouped into similar categories known as output classes. It is a legislative requirement that agencies provide in their Budget papers a statement of output classes, outputs and the performance criteria to be met in providing the outputs during the year (Central State Chief Minister, Treasury and Economic Development, 2019). Output measures are established to assist in the monitoring of output performance. Mapping of agency inputs to outputs complete the OBPM model which assist executives in decisionmaking, particularly, linking the agency’s inputs and resources to the Government’s desired outcomes.

Case A has performance reporting requirements under the FMA, which are fulfilled through the annual Budget, coordinated by Central State Treasury. Case A in association with Central State Treasury establishes strategic priorities and accountability indicators that aim to provide evidence of the impact of outputs on outcomes. It also aims to establish the efficiency and effectiveness of the delivery of the outputs. Case A produces performance reports pursuant to the provisions of FMA to ensure accountability and transparency for the outcomes of government decisions. The Central State Performance and Accountability Framework exists to enforce the accountabilities and

responsibilities imposed by these legislative obligations. Case A is required to apply the principles and processes outlined in the OBPM Framework to deliver continuous improvement in government operations and outcomes, to the benefit of Central State citizens (Central State Chief Minister, Treasury and Economic Development, 2019).

The performance reports provide information about the impact of the Government's policies and initiatives towards meeting its strategic priorities, outlines the Government's commitment to delivering improved outcomes for the Central State community and Key Performance Indicators (KPIs) relating to outcomes. Specifically, the annual Budget Papers include strategic and accountability measures for each agency. Annual reports include annual strategic and output based accountability performance measures. Half yearly departmental performance reports include progress updates on delivery of outputs (The Allen Consulting Group, 2010).

1.2 Importance of the area being investigated

Despite the widespread use of PMS in public sector organisations worldwide, there has been criticism that they are still not being used effectively in fostering performance improvement and enhancing accountability (Vakkuri and Meklin, 2006; Melo *et al.*, 2010; Biron *et al.*, 2011; Canaway *et al.*, 2017; Ahenkan *et al.*, 2018). A study undertaken by Goh *et al.*, (2015) suggested that it is still not clear if performance measurement results in better decision and improved outcomes. In a similar vein, Sanger (2008) found that there are still obstacles to effective implementation of PMS in local and state governments in the USA.

PMS literature demonstrates that the lack of measurement and disclosure of outcome indicators to external stakeholders reduces the accountability of the government spending and the services delivered by the public sector. The revealed weaknesses in the public sector accountability such as lack of effectiveness indicators, greater emphasis on description of inputs, activities and processes with relatively few output or outcomes measures and achievements, failure of market-based performance management system in a socio-economic context and conformance-only approach to performance within fragmented and networked system prompted the need to examine the critical factors that shape the use of OBPM in the Australian Public Sector (ANAO, 2002; Rkein and Andrew, 2012; Holloway *et al.*, 2012; Akbar *et al.*, 2012).

Recognising the limitations of current performance management practice and its generally poor implementation in the Australian context, the following question represents one of the main challenges in the field of OBPM in the public sector: which are the factors and how do they shape the utilisation of OBPM? How OBPM is influenced by the various factors at the state level has been a

neglected area of research given the importance it has for improving performance and governance. This study is, therefore, motivated to examine the factors that impact on the use of OBPM. The increasing evidence in the PMS literature also clearly suggests the importance of the need to examine the factors that influence PMS in the public sector (Pollanen, 2005; Sole, 2009; Sole and Schiuma, 2010; Dormer *et al.*, 2010; Hawke, 2012; Akbar *et al.*, 2012; Baird *et al.*, 2012; Goh, 2012, Toong and Lee, 2018; Samal, 2019; and Mansoori, 2020).

A number of external and internal factors influencing the use of PMS are reported in the literature (Hawke, 2012; Akbar *et al.*, 2012; Baird *et al.*, 2012; Goh, 2012; Adebajo *et al.*, 2013; Suppa and Webb, 2016) that brought about significant changes to the public sector performance management regimes in both local and in international context. Following extensive review of the PMS literature and based on the recurrence of these factors throughout the literature reviewed, the three internal factors: leadership/ management commitment, employee engagement and organisational culture have been selected. Hence, these factors are chosen on the basis of the frequency in which they are reported in the literature.

The previous studies have employed research methodologies such as survey research (Baird *et al.*, 2012; Sole and Schiuma, 2010), archival secondary data sources, content analysis and literature reviews (Hawke, 2012; Goh, 2012; Sole, 2009). To derive a more in-depth findings and offer insights that may not be achieved with other approaches adopted in previous studies, the present study will employ a qualitative, single-case methodology. The case study approach provides an empirical insight into the use of OBPM through a deeper understanding of factors that affect the use of OBPM in Case A.

Hawke (2012) and Baird *et al.*, (2012) examined the factors that influence the successful implementation of PMS in Australian and Indonesian local government respectively. For instance, Hawke (2012) found that the external and internal factors play an important role on the success of PMS in Australian government. In Hawke's view, the key factors such as political, technical, structural factors, finance and ANAO play crucial role in establishing, refining and maintaining the performance management system in Australian public sector. These factors exhibit positive features in achieving a stable and sophisticated PMS system. However, Hawke further stated that factors such as variability and general weakness in the quality of performance measures at the agency and organisational level pose persistent challenges on the success of the performance management framework. According to Hawke, the factors such as management, behaviour and culture needs to be taken into account to overcome these challenges. The internal factors such as managerial and cultural factors that were examined in Hawke's study will form the basis of the investigation in this

research. To extend the prior work undertaken by Hawke, the proposed study will collect data by case study and interviews to have a better understanding of the influences: managerial and cultural on use of OBPM at an agency level at the state level government.

Baird's *et al.*, (2012) study demonstrated the association between the organisational factors and organisational culture with the effectiveness of PMSs in Australian local government. The authors collected data through a survey from a random sample of four hundred and fifty Australian local government agencies. The authors conducted five-point likert scale and factor analysis to analyse the data. The research established that PMSs of Australian local councils are significantly effective in relation to three organisational factors (the use of multi-dimensional performance measures, link of performance to rewards and training) and two organisational cultural dimensions (team work/respect for people and outcome orientation). The authors' further claimed that PMSs are only moderately effective with regard to performance related outcomes and less effective in connection with staff related outcomes. Their research asserts that different factors were found to influence the effectiveness of PMSs for large and small sized councils.

Sole (2009) carried out a literature review to analyse the characteristics of PMSs in public organisations. In his study, Sole highlighted the main factors driving the performance in the public sector. The author claimed that both internal factors such as leadership and external factors such as legal requirements drive PMSs in public organisations. For instance, the study identified that the effective introduction and implementation of PMS is positively related to leadership. Leadership support was identified as a critical factor contributing towards the design and deployment of an effective PMS. Particularly, he found that the senior executive and manager's involvement substantiated successful implementation of PMS. Regarding the internal resources, the study indicated that the development of PMS requires lot of time and effort.

Sole (2009) further stated that the employee engagement during the development of PMS has great impact on its success and could encourage employees' accountability, learning and motivation. Sole (2009) stressed that citizens and elected officials have significant influence on the implementation of PMSs in public organisations. Regarding the legal requirements, Sole's view seems to be that organisations may only satisfy a law or administrative regulation by adopting measures without effectively using them. The internal factors including leadership, management commitment and employee involvement presented in Sole's study is examined further in the current research.

This study focused on the state level government in Australia as a lack of focus on this level of government have been identified in previous studies. This study examined the factors highlighted in

Sole's study (2009). Specifically, the use of OBPM is assessed by the extent to which it is affected by the internal factors: organisational culture, employee engagement and leadership and management commitment. Sole's (2009) factors are adjusted to reflect how these internal factors shape the use of OBPM in state government environment in Australia.

Leadership and internal management commitment

The previous studies found that the factors such as the leadership support and commitment at both the political and administrative level exerts influence on OBPM in the public sector (Cavalluzzo and Ittner, 2004; Tung *et al.*, 2011; Akbar *et al.*, 2012; Jalaludin and Nabhia, 2018). Sole (2009) highlighted that leaders play a critical role in devising and deploying effective performance measurement and management systems. Similarly, Sanger (2008) argues that an effective use of PMS requires strong and committed leadership from the top down and the bottom up. Likewise, Melkers and Willoughby (2005) highlighted the importance of leadership at the executive and managerial level for the use of PMS in the public sector. Similarly, a study undertaken by Akbar *et al.*, (2012) suggested that the success of PMS in Indonesian local government (ILG) was greatly dependent on internal factor such as management commitment through good leadership.

Perrin (2006) asserted that strong support from top political or administrative levels is essential to provide legitimacy and priority to an OBPM and to ensure that it is actually implemented. In Perrin's view, an OBPM system also required support throughout the system, particularly, at the middle-management levels to prevent the risk of it becoming a mere administrative and form-filling exercise. He stated that countries that have moved in this direction have used various strategies to change the culture towards one where there is buy-in and commitment to an outcome-oriented philosophy.

This study examined the impact of leadership and management commitment on the use of OBPM. That is, the study investigated whether the leaders in Case A were instrumental and supportive in making OBPM system effective in the organisation by focussing on results and encouraging learning to achieve higher performance results. In particular, this study focused on internal management commitment that brought formality to OBPM and as a consequence could influence employees' commitment to achieving targets and improving performance.

Employee Engagement

The concept of employee engagement has gained a great deal of interest recently. Saks (2019) noted that employee engagement is positively related to organisational performance and business results. This is consistent with the findings of Harter *et al.*, 2002 which highlighted that there is a positive

connection between employee engagement and business results. Similarly, Vance (2006) claimed that employees who are engaged in their work provide competitive advantage to their organisations including higher productivity and lower employee turnover. Employee engagement is considered to have positive consequences for organisations (Saks, 2006). Ibrahim and Falasi (2013) highlighted that engaged employees can help organisations achieve its missions, execute its strategy and generate business results.

Sole (2009) noted that employee engagement such as the involvement and motivation of employees during the development of performance measures and PMS could have great impact on its success through employees' accountability, learning, motivation and contribution to solutions. Likewise, Perrin (2006) claimed that an OBPM is more likely to be perceived as useful and relevant when all staff are actively involved in the development process.

To increase understanding about the impact of employee engagement on the use of OBPM in Case A, this study examined and analysed the factors such as employees' involvement in the planning process; employees' involvement in the design of the OBPM system, employees' influence on the choice of performance measures and the training and support provided by the organisations to the employees' that assist them to use of OBPM system effectively.

Organisational Culture

Organisational culture is defined as set of beliefs, ideologies, behaviours and values prevalent in organisations (Sole, 2009). A number of studies have incorporated organisational culture as a possible factor that can influence the business performance generally (Kotter and Heskett, 1992; Ogbonna and Harris, 2000; Chan *et al.*, 2004; Deshpande and Farley, 2004). A research undertaken by Baird *et al.*, (2012) indicated that the PMS of Australian local councils are significantly effective in relation to organisational cultural dimensions such as team work, respect for people and outcome orientation.

Apparently, an increasing number of studies encompassing organisational culture as a possible factor influencing PMS in the public sector clearly demonstrated the importance and the need to embrace organisational culture as one of the critical factors shaping the use of PMS. Schein (1992) noted the impact of organisational culture on the use of PMS. In a similar vein, Baird *et al.*, (2012) and Sole (2009) identified the effects of the organisational cultural factors on PMS in the public sector. The cultural factors such as performance management culture (Garg and Deshmukh, 2012; Indudewi and Nafasita, 2012; Langfield-Smith *et al.*, 2015) culture of communication (Armitage and Parrey, 2013 and Vangen, 2017), culture of shared understanding (Collings and McMackin, 2017),

culture of social networks (Grills *et al.*, 2012; Chin *et al.*, 2015) and culture of evaluation and learning (Goh, 2012; Loud, 2014) represented important factors influencing and facilitating commitment and acceptance to OBPM in the public sector.

Therefore, the present study included organisational cultural factors that were considered to affect the use of OBPM in the case organisation. The organisational cultural factors that were examined for their impact on the use of OBPM in Case A included: performance management culture, culture of incentives and rewards, evaluative and learning culture, administrative culture that encourages explicit training and regular communication between leaders, managers and their subordinates, culture of social networks and shared understanding.

Performance Management Culture

There is limited literature on the effect of performance management culture on the use of OBPM. Sole (2009) indicated that performance management culture was found to be a critical factor for improving the effectiveness of PMS. Langfield-Smith *et al.*, (2015) highlighted that performance management culture promotes a positive approach to performance management and helps integrate OBPM into strategic planning process, which provided top management with guidance in the developing and implementing of strategies; communicating the plans of the organisation to align the employees' goals with the organisational goals; enabling employees to track organisational performance against targets; and providing evaluation basis for rewards purposes. Jalaludin and Nabiha (2018) highlighted that performance management culture is concerned about regular measurement and reporting of performance for programs and organisations which may affect the use of OBPM in Case.

Sheridan (1992) discussed the characteristics of high performing outcome oriented organisations that focused on action and results, had high expectations for performance and were competitive. A study undertaken by Grutter *et al.*, (2001) found that outcome oriented organisations were more performance oriented. Similarly, Hofstede (1998) indicated that employees in outcome-oriented organisation were more motivated through new challenges and therefore were more likely to apply maximum effort to their work.

Incentive and Rewards for Performance Improvement

A number of studies have found positive association between linking performance to rewards (Chan, 2004; Johanson *et al.*, 2006; Burney *et al.*, 2009). A study undertaken by Baird *et al.*, (2012) confirmed that the staff were more likely to work towards the achievement of organisational objectives when they saw a linkage between performance to rewards. The findings in Baird's study

are consistent with the literature advocating the positive impact of rewards on employee performance (Rynes *et al.*, 2005). Further, Baird claimed that there were many other benefits of linking performance to rewards which allowed managers to better manage poor performers. The author stated that a link between performance and rewards provided an effective means of convincing poor performers to improve or leave. The study highlighted that the link between performance and rewards allowed managers to focus their attention on accurate performance evaluation based in measurable objectives.

Similarly, a number of studies have examined the importance and benefits of linking performance to rewards that motivated employees to improve performance (Lawler, 2003; Rynes *et al.*, 2005; Swiss, 2005). For instance, studies undertaken by Wright and Davis (2003) and Trevor *et al.*, (1997) found that organisations that distributed rewards to high and superior performers achieved higher staff retention. Gerhart and Rynes (2003) found that besides fulfilling economic needs, rewards also served to meet psychological needs such as security, status and feedback about achievement.

A learning and evaluative organisational culture

Mayne (2008, p. 1) defined learning and evaluative organisational culture as “the culture that encouraged the organisation to deliberately seek out information on its performance and use that information to learn how to better manage and deliver its programs and services and thereby improving performance”. A research undertaken by Goh (2012) showed that the successful implementation of PMS was significantly dependent on a supportive learning and evaluative organisational culture. Goh argued that the evaluative culture entailed building a strong learning capacity including encouraging knowledge sharing, learning through experience, making time for learning and learning from mistakes. The author concluded that strong supportive and evaluative organisational culture included characteristics such as an emphasis on learning from feedback and performance results, encouraging flexibility, adaptability, and the use of results for performance improvements.

Thomas (2007) suggested that organisational culture that supported the constructive use of performance information enabled the successful implementation of PMS and achievement of learning and improvement in programs. In a study of state and local government, Sanger (2008) highlighted that the better understanding of the successful implementation and use of performance information facilitated evidence-based decision-making. Whilst highlighting few challenging obstacles to PMS such as suppressing negative data, staying out of trouble and performing jobs within narrow band, Sanger (2008) suggested for a cultural change for an effective introduction and implementation of PMS. He further stated the culture of the public sector organisations that

focussed on results, encouraged learning and promoted experimentation to achieve higher performance were created by committed and result-oriented leadership.

Communication and Training

Sanger (2008) demonstrated that the efforts such as regular communication and explicit training, which reinforced employee participation and engagement were critical for the implementation of the PMS in the public sector. Melkers and Willoughby (2005) highlighted the importance of having the technical capacity and professional expertise for using PMS.

A study undertaken by Sole and Schiuma (2010) revealed that many organisations used scarce resources such as a lack of investment in training activities in the implementation of the PMSs. Their study highlighted that lack of formal training had an adverse effect on the quality of data collection and its use. Similarly, Perrin's (2006) identified a lack of sufficient capacity and expertise in result-oriented thinking and more specialised tasks such as monitoring and evaluation as major hurdles to an outcome-oriented approach in countries that have adopted an outcome-focused PMSs.

1.3 Research problem, research questions and proposed contribution

1.3.1 Research Problem

Research to date identified a number of factors that have been shown to affect the use of OBPM in public organisations. These factors have emerged from theory and from empirical studies and the researchers have used surveys, case studies and literature review to examine the factors. For instance, Hawke's (2012) study focussed on factors affecting the PMS at the national level government in Australia; Baird, Schoch and Chen (2012) demonstrated the effect of internal factors on PMS in Australian local government; Akbar *et al.*, suggested that PMS is shaped by both internal and external factors in Indonesian local government; Sole and Schiuma (2010) examined the effect of the factors on PMS in public organisations in Italy; and Dormer *et al.*, (2010) demonstrated how the factors affect the PMS in the New Zealand public services. The findings of these previous studies do not yet provide a clear picture on the impact of these factors on the use of OBPM at the state government in Australia.

Based on the literature review conducted, this study focused on three internal factors affecting the use of OBPM in a state government in Australia. This study included the following factors:

- leadership and management commitment
- employee engagement
- organisational culture

From the theoretical and empirical literature, the following research problem emerged:

How do the internal factors (leadership/management commitment, employee engagement and organisational culture) shape the use of an OBPM in Case A?

Based on previous studies, the institutional theoretical approach was selected and thus this study applied institutional theory to investigate the impact of coercive, normative and mimetic pressures on use of OBPM in Case A (DiMaggio and Powell, 1983; Perrow, 1985; Scott, 1987; Covaleski and Dirsmith, 1988; DiMaggio, 1988; Lapsley and Pallot, 2000; Pilcher, 2011; Manville and Greatbanks, 2020; George *et al.*, 2020). These researchers argued that Institutional theory provided a deeper understanding of organisations' institutional environment that exerts influence on the organisations. Accordingly, the institutional theory was used to explain and improve our understanding of the internal factors shaping the utilisation of OBPM in Case A within its institutional environment.

From an institutional theory perspective, organisations are social systems (Scott, 1987). Hence, the view taken in the proposed study is that Case A is socially constructed and therefore its internal policies and procedures were subject to different forms of environmental pressures. The research examined the effect of coercive, normative and mimetic forces on the use of OBPM in Case A. A detailed discussion of the selected theoretical approach is provided in Chapter 2.

1.3.2 Research Questions

To address the above postulated research problem, the following subsequent research questions were identified against which data were collected, analysed, and interpreted:

RQ 1: How does the employee engagement influence the use of OBPM in Case A?

RQ 2: How does the organisational culture affect the use of OBPM in Case A?

RQ 3: How does the leadership and management commitment shape the use of OBPM in Case A?

An increasing number of studies encompassed organisational culture as a possible factor influencing PMS in the public sector. Various commentators have clearly demonstrated the need to understand and raise awareness among practitioners of the the role of the organisational culture on the use of OBPM in the case organisation (Loud, 2014; Langfield-Smith *et al.*, 2015; Chin *et al.*, 2015; Vangen,

2017; Collings and McMackin, 2017; and Bach *et al.*, 2018). Thus this research examines how does the organisational culture affect the use of OBPM in Case A. The previous studies highlighted that organisational culture has a positive impact on the use of PMS and has a significant role in achieving higher performance in public organisations. These studies asserted that the effective and long-lasting PMS requires a cultural shift in organisational thinking and behaviour about PMS. Sole (2009) stressed that no matter how effective the PMS is, ignoring culture will diminish chances for success.

The study of employee engagement has received a great deal of attention in the management literature in recent years (Wairimu and Theuri, 2014; Reid, 2014; Jin and McDonald, 2017). These studies show that employee engagement boosts productivity, improves organisation performance and business results. Much of the literature on employee engagement was derived from the private sector. There are few employee engagement studies of the public sector where employee engagement is cited as a critical factor exerting influence on individual and organisational performance (Shuck, 2011). Therefore, this study included employee engagement as a factor that was considered to shape use of OBPM in the public sector and provided further insight of the impact of employee engagement on the use of OBPM. Drawing from the institutional theory as a guiding theoretical principle, this study contributes to the understanding of the role of employee engagement on the use of OBPM in the public sector including: employees' perception of the usefulness and effectiveness of OBPM; employees' engagement in strategic planning and design of KPIs; employees' engagement in the design of OBPM systems; employees' know-how and understanding of KPIs; and the support and training provided to the employees by the organisations.

A number of studies examined the impact of leadership and top management support and commitment on the use and implementation of PMS (Hennessey, 1998; Bourne *et al.*, 2002; Pollanen 2005; Sanger 2008; Sole 2009; and Akbar *et al.*, 2012). These studies established that top management support was influential in the successful implementation and on-going usage of the new PMS. Similarly, the current study aims to empirically examine the impact of political and executive leadership and management commitment on the use of OBPM in Case A.

1.4 Justification for the research

This study was justified on the basis of identification of a lack of research by previous researchers on the impact of factors on the use of OBPM in a state government in Australia. Many of the existing studies undertaken nationally and internationally outlined the factors that affected PMS in the public sector (Pollanen, 2005; Sole, 2009; Fryer *et al.*, 2009; Sole and Schiuma, 2010; Dormer *et al.*, 2010; Hawke, 2012; Akbar *et al.*, 2012; Baird *et al.*, 2012; Goh, 2012; Jaaskelainen *et al.*, 2013; Suppa

and Webb, 2016). However, most of these studies specifically focused on the effects of internal and external factors on the design, implementation and use of PMSs in only two tiers of government, that is, national and local level. For example, Hawke (2012) and Baird *et al.*, (2012) examined factors exerting influence on PMSs in commonwealth and local governments respectively.

Whilst there is a wealth of literature on factors affecting PMS, most of the literature focused primarily on the federal and local governments nationally and internationally resulting in the gap in the knowledge and in the current body of empirical literature. Limited study has been conducted to investigate the factors influencing the use of an OBPM at the State level government in Australia. This resulted in a gap hence providing an opportunity for potential research, particularly, an investigation of the factors exerting influence on the use of an OBPM in a state government organisation. There is limited knowledge about the characteristics of OBPM in state government and little research has been conducted on the influence of the factors on the use of OBPM in a state government in Australia. Therefore, it is necessary to increase our understanding about critical factors shaping the use of OBPM in the state Government. Thus the current study contributed to the existing literature by investigating how the internal factors shape the use of OBPM in a state level government in Australia.

1.5 Proposed contribution

Using a descriptive approach, this study provided new evidence in the Australian context and made a contribution to both research and practice. In terms of its contribution to the research, the current study contributed to the PMS literature by adding to the limited body of research by examining and presenting the results of a qualitative research, particularly, the effects of internal factors on the use of OBPM in the Central State government.

The current study also demonstrated the usefulness of institutional theory in highlighting the key internal factors shaping the use of OBPM in Case A. Using the institutional theoretical framework, the research examined three internal factors and opened an avenue for future research in this area to use this framework to examine other internal factors and external factors shaping the use of OBPM. This study developed a framework that provided valuable insights to other public sector healthcare organisations as well.

1.6 Methodology

The present study was carried out using a qualitative approach. This study took a positivist and deductive approach to case study design where the research questions were defined in advance of

data collection (Rowley, 2002). Rowley stated that the positivist approach underpins the structuring of data collection and analysis and understanding and management of issues such as validity and reliability. This approach was distinguished from the grounded theory or inductive approach in which questions emerged from the data collection. Rowley (2002) identified three factors which apply to this type of research including: type of research question, the extent of researcher's control over behavioural events and the level of focus on contemporary as opposed to historical events.

In particular, this study adopted a single-case study research approach. The researchers (Yin, 1994; Rowley, 2002; and Yin, 2003) highlighted the following benefits of using a case study methodology:

- it allowed an investigation to retain the holistic and meaningful characteristics of real-life events;
- it used multiple data sources such as interviews, direct observations, participant observations, documents and archival records which supported deeper and more detailed investigation in providing responses to how and why questions about a contemporary set of events; and
- it took a holistic case study approach which focussed on broad issue of OBPM in Case A and the factors affecting the use of OBPM in the organisation.

The unit of analysis for this research was organisational. In this study, the case selection was determined by the research purpose, questions and theoretical context (Rowley, 2002) and in terms of size, location and organisational structure. This study used purposeful sampling (Patton, 1990) to select participants who were best able to inform the research question and enhance understanding of the phenomenon under study. This study entailed semi-structured interviews with key participants (Burgess, 1982). An interview protocol was used in this research (Larson, 1992). Prior to commencing the interviews, written consent was sought from the Ethics Committee in the case organisation. Interviews were tape recorded and fully transcribed. The data collection process was guided by a case study protocol (Yin, 2003). This study adopted two key principles during the data collection phase of the research including triangulation and case study database (Rowley, 2002).

In this study, data analysis was carried out using thematic analysis. Thematic approach is widely used analytical method in qualitative research (Roulston, 2001) and focuses on reading transcripts, producing codes, identifying themes, comparing and contrasting themes and building theoretical models. The present study espoused the method for thematic analysis discussed and presented in Braun and Clarke's (2006) study who claimed that it provides flexible and useful tool and offers rich and detailed analysis of qualitative data. The authors claimed that thematic approach is compatible with grounded theory, for example, the processes involved in thematic analysis is very much akin to

the set of procedures entailed for coding data in grounded theory. The goal of grounded theory is to construct theories that are grounded in the data themselves (McLeod, 2001).

The study undertaken by Braun and Clarke (2006) found that the themes or patterns within the data were identified in two primary ways in thematic analysis: inductively or deductively. Deductive approach or theoretical thematic analysis was theory-driven and was more explicitly analyst-driven (Braun and Clarke, 2006). This form of analysis was regarded to be less descriptive overall because analysis is limited to the preconceived frames. On the other hand, in an inductive approach the themes identified were strongly linked to the data (Patton, 1990) and as such this form of thematic analysis had some similarity to grounded theory. Braun and Clarke (2006) claimed that the themes identified were not driven by the researcher's theoretical interest in the areas. This implied that the process of coding occurred without trying to fit the data into a pre-existing model or frame. This form of thematic analysis was considered data driven. However, the study noted that throughout the inductive process, it was not possible for the researchers to free themselves from their theoretical and epistemological commitments.

The present study adopted an inductive approach and focused on identifying, analysing and reporting patterns (themes) within data. Braun and Clarke (2006) highlighted that a theme represented a level of patterned response or meaning within the dataset that was related to the overall research question. The authors suggested that prevalence of theme in the data was used to determine theme: both in terms of space within each data item, and prevalence across the entire data set. In this study, the researcher used her judgement to determine which themes were more crucial.

Further, Braun and Clarke (2006) highlighted different levels at which themes were identified including at a semantic or latent level. A thematic analysis generally focussed on solely or mostly on one level. With a semantic approach, the authors claimed that the themes were identified within the explicit and surface meanings of the data and the researcher did not look beyond what the participant said or wrote. In this instance, a rich description of the entire data set was represented whereby the researcher described the patterns in semantic content and interpreted through theorising the significance of the patterns and their broader meanings and implications.

Conversely, latent themes pinpointed underlying ideas, assumptions and conceptualisation that were theorised as shaping the semantic content of the data (Braun and Clarke 2006). The development of themes within latent thematic analysis required much interpretation of the data but not just description of the data. In this instance, the researcher focussed on one specific question or

area of interest across the majority of the dataset. In the present study, the researcher examined semantic themes through the process of coding in six phases of thematic analysis to create established and meaningful patterns (Ponnam and Dawra, 2013). Through the process of coding, the researcher organised the data into meaningful groups (Tuckett, 2005) and developed themes within the raw data by recognising interesting aspects of the data.

1.5 Outline of this thesis

The introduction chapter provided an overview of the thesis including: the background to the research; research problem; research questions; proposed contribution; justification for the research; methodology; structure of the thesis; and delimitations. The second chapter provided a comprehensive literature review of the factors shaping the use of OBPM in the public sector and the theory underpinning OBPM. The second chapter presented a theoretical framework with a focus on the application of institutional theory to investigate the impact of coercive, normative and mimetic pressures on the use of OBPM in the case organisation. In the third chapter, the research methodology including data collection, analysis and interpretation methods, validity and reliability were described.

The fourth, fifth and sixth chapters presented a detail analysis of the results ascertained by evidence obtained through interviews conducted with the participants and documentation. These chapters also contained a discussion of the research problem and associated research questions. Conclusions were then presented, which were drawn from examining the research questions related to research problems. This chapter identified contributions of the research, implications for theory, practice and methodology. The limitations of the research were acknowledged and areas for further research were presented.

1.6 Delimitations of scope and key assumptions, with their justifications

This study was subject to the usual limitations associated with validity and reliability of the findings in case studies (Condi, 2012; Singh, 2014). However, the techniques used to address the validity and reliability issues in this study included the use of multiple sources of evidence (interviews, direct observations, participant observations, documents and archival records), establishing a chain of evidence and having draft study report reviewed by key participants (Yin, 1994). Secondly, another limitation was the lack of generalisation of the result of a single case study approach to different settings (Amaratunga and Baldry, 2001). However, the case organisation studied was not unusually different from its counterparts within the country and, hence, the insights of the study could likely to be a good starting point when examining similar organisations. As such this single case provided

considerable insights to the views of managers in relation to the internal factors shaping the use of OBPM in Case A that could be applied elsewhere.

1.7 Conclusion

The PMSs in the public sector does not operate in isolation, but rather gets developed and refined in interaction with many factors. In conclusion, the issues related to PMSs in the public sector can thus be analysed and interpreted in the light of many factors affecting the development and use of PMSs. This chapter discussed the various internal factors cited as important and that have influenced the use of PMSs in the public sector. These factors have been given considerable attention in the previous studies, it was thus necessary to answer a fundamental question: *How do the internal factors: leadership/management commitment, employee engagement and organisational culture influences the use of OBPM in Case A?*

This chapter provided relevant insights on the practical experiences of problems implied in the implementation and use of OBPMs in the public sector, including the challenges associated with OBPM in the public sector and the impact of the internal factors on the use of OBPM. This chapter discussed how the institutional factors systematically shaped the use of OBPM in the case organisation.

The chapter also detailed justification for the research and an overview of the methodology, key definitions, delimitations of scope, and assumptions.

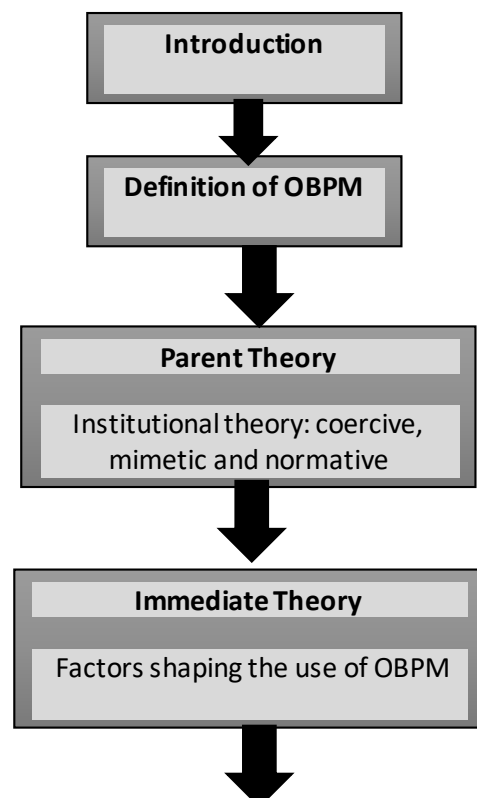
Chapter 2: Literature Review

2.1 Introduction

This chapter provides an extensive review of existing knowledge in regards to the use of performance management system in various organisational settings. This study has identified relevant gaps in the literature and provided an initial step to better understanding of the effect of specific institutional factors in a unique organisational setting. The selection of institutional theory is considered and justified in the following sections. Institutional theory is a well established framework that has significant relevance in accounting research. It has been used extensively in performance management research.

The present study aimed to empirically examine the internal factors influencing the utilisation of OBPM in Case A in the Central State. In particular, the study used the conceptual models developed by Sole (2009); Tung *et al.*, (2011); Goh (2012); and Baird *et al.*, (2012), with minor adjustments to fit the context of the current study. In addition, the study aimed to analyse, interpret and explain empirical evidence in the perspective of the institutional theory. This study used institutional theory to ascertain the extent to which OBPM was influenced by the presence of coercive, mimetic and normative isomorphism forces. Figure 1 presents the content of the literature review chapter, including the definition of OBPM, parent theory, immediate theory, theoretical framework, research problem and research questions.

Figure 1: An outline of literature review chapter



Theoretical Framework, Research Issues and Questions

How do the internal factors shape the use of an OBPM in Case A?

(Adapted from Chew 2001)

2.1.1 Purpose of OBPM

As with any emerging field, there is a considerable confusion about the terminology used to describe the OBPM in the public sector. Different terms have been used to describe OBPM initiatives in the public sector, namely, result based service delivery; accountability for outcomes; effect of government outputs; quality and effectiveness of government programs; government performance; improvements in performance and transparency; public trust; political and civic support; strategic planning and decision-making; and social responsibility (Pollanen, 2005; Sven and Gronlund, 2007; Sanger, 2008; Silva and Ferreira, 2010; Greiling, 2010; Jaaskelainen, 2010; Tan, *et al.*, 2011; Rkein and Andrew, 2012; Akbar, *et al.*, 2012; Holloway, *et al.*, 2012).

The core purpose of public OBPM was identified to be broader and more explicit for public sector organisations, which included serving the interests of different stakeholders and providing services to the community that were designed to enhance efficiency, effectiveness and accountability in the pursuance of societal goals (Jain and Gautam, 2016). Public OBPM was concerned with result-based regimes, including a results-based planning, results-based monitoring, results-based evaluations and reporting on results-based data. Public OBPM was associated with enhancing external accountability for outcomes by providing information on the extent to which the expected outputs and outcomes were attained and their associated costs, demonstrating the contribution made by the program to the outcomes and providing assurance that the means used were sound and proper Mayne (2008).

2.2 Institutional Theory

Many institutionalist theorists, such as DiMaggio and Powell (1983); Perrow (1985); Scott (1987); Covalleski and Dirsmith (1988); DiMaggio (1988); Lapsley and Pallot (2000); and Pilcher (2011) have suggested that institutional theory provided a deeper understanding of how varied institutional pressures arising from organisations' institutional environment exerted influence on the organisations. Many recent researchers have examined management accounting topics from an institutional perspective (Ezzamel, *et al.*, 2007; Kilfoyle and Richardson, 2011; Hoque and Chia,

2012). Some strands of institutional theory used institutional isomorphism to explain how organisations conformed to isomorphic pressures in their environment to pursue legitimacy (Ashworth *et al.*, 2009; Kilfoyle and Richardson, 2011). While these studies have emphasised the institutional factors influencing the implementation of PMS in the national and local government, how these factors affect the use of OBPM in the state government needs addressing. Similarly, this study examined the impact of institutional factors on the use of OBPM in Case A. Particularly, this study used DiMaggio and Powell's (1983) theoretical construct of institutional isomorphism (coercive, mimetic and normative) to analyse the empirical data, and examine the impact of these institutional pressures on the use of OBPM in Case A.

Institutional theory is commonly used as the theoretical framework to explain the development, implementation and use of accounting systems Aldemir and Uysal (2017). Similarly, the main aim of this study is to explain the development and use of public accounting system (OBPM) with the help of institutional theory. Aldemir and Uysal (2017) highlighted that mimetic isomorphism includes factors such as uncertainty and ambiguity that pushes organisations to imitate. Similarly, Guerreiro *et al.*, (2020) highlighted the capacity of institutional theory in rendering in-depth understanding of adoption and implementation of accounting practices and systems. For example, Guerreiro *et al.*, (2020) asserted that the adoption of accounting practices such as International Financial Reporting Standard is characterised as a form of coercive power. However, mimetic isomorphism also shape the adoption and implementation of IFRS by the organisations. Mimetic isomorphism allows conformity through imitation so that the organisation became similar to the other successful organisations in its institutional environment. Carpenter and Feroz (2001) identified that normative isomorphism impeded the adoption of accounting principles in four U.S. State government organisations where the accounting bureaucrats were not active in professional associations that promoted the adoption of accounting principles.

Likewise, this study is aimed to explain all the factors that provide the institutionalisation of OBPM in Case A. In particular, this study focuses on the institutional isomorphism that occurs in three mechanism: coercive; normative; and mimetic pressures and how they shape the use of OBPM in Case A.

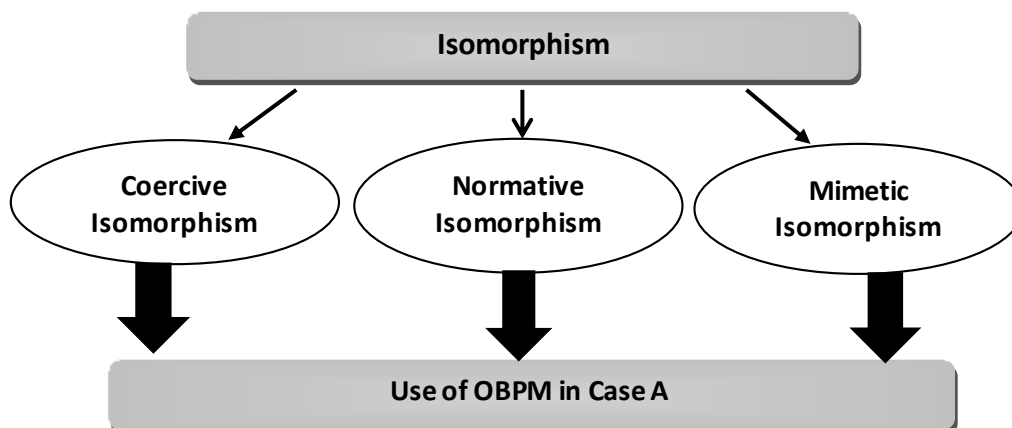
Previous studies provided explanation of how institutional forces influenced the accounting activities in today's socio-economic space (Carpenter and Feroz, 2001; Alsharari and Abougamaos, 2017; Alsharari, 2018). These studies focussed on the institutional pressures that affected the design, implementation and use of accounting polices, practices and systems in public sector. For example, Carpenter and Feroz (2001) identified that resource dependency had its greatest influence as an effective coercive institutional pressure for accounting practices in the four US state governments.

Thus, the approach which is included in institutional theory (institutionalisation, legitimisation and isomorphism) is expected to facilitate the understanding of the factors shaping the development and use of OBPM in Case A.

Institutional theory was identified as a social theory which focused on developing sociological insights into institutions, the way they interacted and their effect on people (Scott, 1987). Institutional theory is concerned with deeper aspects of social systems (Scott, 2004) and is a widely accepted theoretical perspective that provides deep understanding of public sector organisational environments (Akbar, 2012). From an institutional perspective, Case A is a social system and therefore the use of OBPM in this socially constructed environment is subject to the influence from different types of internal and external factors from its institutional environment. Institutional theory, therefore, is considered an effective means by which to examine the influence of specific institutional pressures on the use of OBPM in a complex public sector environment.

Thus the study used the concept of institutional isomorphism and contributed to the literature by providing a comprehensive analysis of the influences of the pressures from an institutional environment on the use of OBPM in Case A. DiMaggio and Powell (1983) described isomorphism as a process that encouraged organisations to evolve in conformity with the relevant norms, values and beliefs in order to gain legitimacy and access to resources. DiMaggio and Powell (1983) identified three mechanisms through which organisational isomorphism occurred. These were termed coercive, mimetic and normative isomorphism. The isomorphic factors that influence the use of OBPM in Case A is illustrated in Figure 2.

Figure 2: An Institutional Isomorphism Framework



(Developed for this research using information from DiMaggio and Powell, 1983; Ohemeng, 2011; Akbar et al., 2015; Munir and Baird, 2016).

In institutional theory, political influence and government legislation were identified as primary sources of coercive forces (Akbar et al., 2015; Munir and Baird, 2016). That is, the organisations that

wished to acquire legitimacy were required to follow the standards of practice articulated in the relevant legislation generated by government and the politicians. In their study, Akbar *et al.*, (2015) and Munir and Baird (2016) found that the Indonesian local government agency was financially dependent on the central government and received funding from central government via a national budget appropriation process. This finding was in line with DiMaggio and Powell's (1991) position who claimed that coercive isomorphism was more likely to occur when there was financial dependence. This implied that the external pressures, often from politicians and central government, left lower tiers of government such as state and local governments with no other choice but to comply with the rules, regulations and legislation. Failure to comply with these legislative requirements resulted in potentially adverse consequences in the budgets of lower tiers of government.

A second form of isomorphism in institutional theory identified by DiMaggio and Powell (1983) was normative isomorphism. DiMaggio and Powell (1983); Ohemeng (2011); Akbar *et al.*, (2015); and Munir and Baird (2016) highlighted that normative isomorphism was concerned with shared norms amongst organisations. Ryan and Purcell (2004, p. 10) described normative isomorphism as "shared norms of organisational members including the values, beliefs and rules that they adopt in their various domains of social conduct that have gained acceptance within the organisations." Dacin (1997) asserted that organisations were forced to follow best practices or normative guidelines. Mizruchi and Fein (1999) highlighted that normative isomorphism took place when norms were internalised within organisations. Under normative isomorphism, new policies and practices were adopted due to the changes in values, beliefs and management philosophical approach (Ohemeng, 2011). In this situation, managers were either expected to convert to the new ideology or get replaced by the managers who already adhere to the new values and beliefs. This implied that the notion of normative isomorphism is founded on what is perceived as suitable for an organisation within a particular organisational context. That is, the normative pressures of the institutional environment such as norms, values, management philosophical approach had an important impact on organisational choices, including the adoption of PMS.

Professionalism also formed the primary basis of the normative isomorphism in institutional theory (Ang and Cummings, 1997). Normative isomorphism was concerned with the way both formal and informal collaboration led to more homogenisation of organisations. DiMaggio and Powell (1983) argued that government employees and officials actively participated in events such as conferences, educational programmes (degree and non-degree) and professional trainings organised by professional networks and institutions and through participation in these events they learnt

acceptable norms of practices which influenced their decision-making. DiMaggio and Powell claimed that the more educated the workforce became, the greater the extent to which the organisation became similar to their peers in the field, which suggested that the organisations encountering normative pressures from professional networks and associations were likely to be isomorphic in the field to gain legitimacy.

Mimetic isomorphism is the third isomorphic factor suggested by the institutional theory (DiMaggio and Powell, 1983) which resulted from responses to environmental uncertainty. Here, organisations imitated other successful organisations as a response to uncertainty and ambiguity (Ohemeng 2011). According to Ikenberry (1990) such actions were described as emulation and bandwagoning. Ohemeng (2011) suggested that organisations tend to copy essential elements of the institutional systems, structures, strategies and practices that were believed to be successful and legitimate. Ohemeng elucidated that the aim of mimetic isomorphism was to achieve conformity through imitation so that the organisation became similar to the other successful organisations in its institutional environment. Therefore, the idea of mimicry was to achieve legitimacy through imitation so that an organisation became more like other organisations in its institutional environment. Similarly, Rkein and Andrew's (2012) study presented the existence of mimetic isomorphism where government agencies operating in a socio-economic context replicated the market-based performance management practices adopted by the private sector agencies that have been deemed to be successful in implementing the PMSs.

Technological advancement also formed the primary sources of mimetic isomorphism in institutional theory (Munir *et al.*, 2016). Traditionally, PMS focused on financial measures designed to describe financial outcomes depicted in the financial statements (Langfield-Smith *et al.*, 2015). However, due to the rapid changes in the institutional environment, the usefulness of the traditional PMS became limited over the years. Traditional PMS were criticised for their excessive reliance on financial performance measures, which failed to help managers in planning, decision-making, monitoring and reporting purposes. To overcome the perceived limitations of traditional financial-based PMSs, various attempts were made to develop innovative PMS systems including the Balanced Scorecard (Hoque, 2014). Likewise, Munir *et al.*, (2013) highlighted that new information technologies have generated pressure for organisations to reassess the appropriateness of their PMS and adapt their systems to make it more effective in meeting the challenges of their changing institutional environment.

Previous studies also indicated that the problems in information systems posed the main obstacles to gaining success in the implementation and use of PMS in the public sector including the

measurement of the performance (Cavalluzzo and Ittner, 2004; Nurkhamid, 2008). These studies identified the limitations of the information system's capability in providing reliable, valid and timely data at in a cost effective manner. DiMaggio and Powell (1983), argued that when organisations experienced environmental uncertainty such as problems in information system, they were more likely to mimic other successful organisations. This implied that mimetic isomorphism was more likely to occur when organisations operated in a highly uncertain organisational environment whereby the uncertain institutional environment placed pressure on government agencies to imitate other successful organisations in the field.

This study examined the application of institutional isomorphism, namely coercive, normative and mimetic to explain the use of OBPM in Case A.

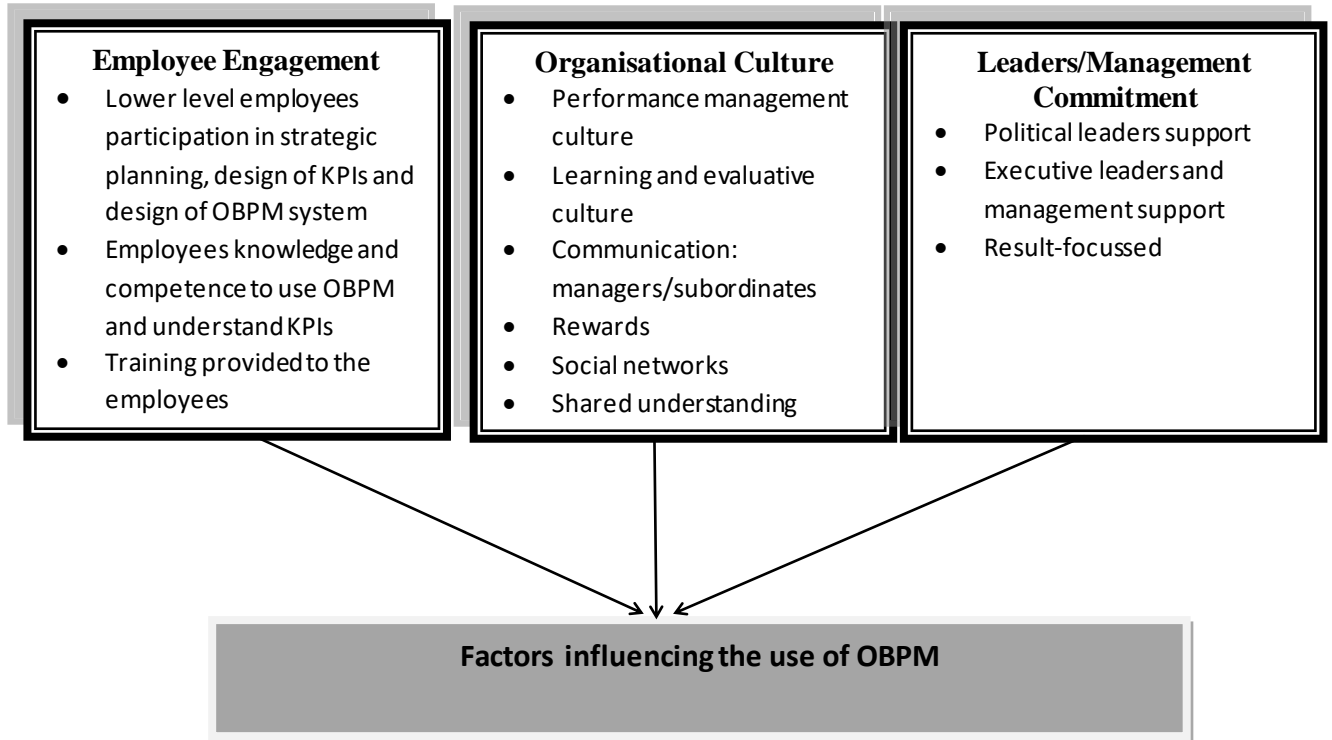
2.3 Factors influencing the use of OBPM

The literature review identified several factors that exerted influence on PMS in the public sector (De Bruijn, 2002; Pollanen, 2005; Elzinga *et al.*, 2009; Sole, 2009; Sole and Schiuma, 2010; Dormer and Gill, 2010; Sillanpaa, 2011; Tung *et al.*, 2011; Hawke, 2012; Akbar *et al.*, 2012; Baird *et al.*, 2012; Goh, 2012; Adebajo *et al.*, 2013; Suppa and Webb, 2016). Based on the recurrence of these factors throughout the literature reviewed, three main factors (employee engagement, organisational culture and leadership/management commitment) were considered to have significant influence on the use of OBPM in the case organisation. This suggested that factors influencing the public sector PMSs are many and complex, however these factors were grouped into two main themes:

- a) **External Drivers:** comprised of factors outside the organisation including economic, legal or ethical, political and technical.
- b) **Internal Drivers:** included factors within the organisation such as employee engagement, organisational capacity, organisational culture, structure and resources, leadership and managerial commitment, and so forth.

Previous studies specifically focused on the effects of internal and external factors on the design, implementation and use of PMSs in only two tiers of government, that is, national and local level (Pollanen, 2005; Hawke, 2012; and Akbar *et al.*, 2012). This study filled this gap and contributed to the existing literature by investigating how these factors shape the use of OBPM in a state government agency. As shown in Figure 3, each of these factors can be divided into sub-factors. These factors are discussed in detail in the next section.

Figure 3: Three main factors that were considered to influence the use of OBPM



(Adapted from Ghaderi et al., 2011)

2.4 Conceptualising Employee engagement

The study of employee engagement has received a great deal of attention in the management literature in recent years (Likierman, 1993; Sole, 2009; Marrelli, 2011; Tung *et al.*, 2011; Wairimu and Theuri, 2014; Reid, 2014; Jin and McDonald, 2017). A number of definitions have been used in the academic literature to conceptualise employee engagement (Jin and McDonald, 2017). Kahn (1990) described employee engagement as the harnessing of organisation members' selves to their work roles in which people employ and express themselves physically, cognitively and emotionally during role performance. Rothbard (2001) defined employee engagement as psychological presence entailing two critical components: attention and absorption; while Shuck and Wollard (2010 p. 103) defined employee engagement as "an individual employee's cognitive, emotional, and behavioural state directed toward desired organisational outcomes".

While Bakker (2011) and Stumpf *et al.*, (2013) indicated the association between employee engagement and individual and organisational outcomes, Marrelli (2011) demonstrated the correlation between employee engagement and positive organisational outcomes such as organisational success, high organisational performance, innovation, higher productivity, increased profitability, higher level of customer satisfaction, lower level of sick leave use, few complaints and

lower levels of attrition. This suggested that employee engagement is often touted as the key to an organisation's success and competitiveness. Based on previous studies, the positive impact of employee engagement on individual outcomes is depicted in Table 1 below.

Table 1: Highly Engaged Employees

- Do their best
- Put organisational interests ahead of their own
- Are innovative and eager to contribute
- Try hard to make the work environment pleasant and respectful
- Find joy in their work

(Adapted from Bakker, 2011; Stumpf et al., 2013)

Furthermore, the previous studies identified the multiple sources of employee engagement and these drivers of engagement are portrayed in Table 2 below.

Table 2: Drivers of employee engagement

External Drivers	Internal Drivers
Trusted leadership	Conscientiousness
Support provided by the organisation	Interest in the work
Compelling mission	The centrality of work in his or her life
Effective PMS	The personal satisfaction derived from work
Immediate manager/supervisor support	Feeling of being valued and worthwhile
Open, two-way communication between the supervisors and subordinate	
Efficient work processes	
Learning opportunities	
Structural empowerment	

(Adapted from Kahn, 1990; Hobfoll and Shirom, 2000; Harter, 2001; Marrelli, 2011; Jin and McDonald, 2017)

While the above studies identified positive impacts of employee engagement, Gruman and Saks (2011) reported that employee engagement was declining and there was a deepening disengagement among employees today. In their study, they illustrated that approximately half of all Americans in the workforce felt disengaged leading to what has been referred to as an “engagement gap” that is costing U.S. businesses \$300 billion a year in lost productivity. Gruman and Saks (2011) emphasised the importance of employee engagement to organisations, combined with the deepening disengagement among workers today leading to the problem of workers' lack of commitment and motivation.

Much of the literature on employee engagement was derived from the private sector. There are few employee engagement studies of the public sector where employee engagement is cited as a critical

factor exerting influence on individual and organisational performance (Shuck, 2011). Therefore, this study included employee engagement as a factor that was considered to shape use of OBPM in the public sector and provided further insight of the impact of employee engagement on the use of OBPM. Drawing from the institutional theory as a guiding theoretical principle, this study contributes to the understanding of the role of employee engagement on the use of OBPM in the public sector including: employees' perception of the usefulness and effectiveness of OBPM; employees' engagement in strategic planning and design of KPIs; employees' engagement in the design of OBPM systems; employees' know-how and understanding of KPIs; and the support and training provided to the employees by the organisations.

2.4.1 Employee engagement in strategic planning

Employee engagement in strategic planning is a contemporary management accounting issues (Kim, 2002 and Wairimu; Theuri, 2014). Research has shown that employee participation provided various benefits for individuals and organisations including increased cross-functional integration, involvement in organisational decisions, improved performance, increased productivity, increased motivation, increased employee satisfaction and commitment, efficient working and improved quality of work (Pfeffer, 1994; Hales, 2000; Strauss, 2006; Armstrong, 2006; Zafar *et al.*, 2014). Participative strategic planning resulted in better understanding of the vision, mission, corporate objectives, operating environment, stakeholders' role and work expectations and the influence over the organisation's environment.

Dandira (2011) described six-step strategic planning process which included defining vision and mission, conducting environmental scanning, forming goals, objectives and strategies, developing performance targets, executing strategies, monitoring and controlling the operational efforts. Kim's (2002) study showed that strategic planning has been widely implemented in government agencies. This widespread use of strategic planning in government agencies raised a question regarding participative strategic planning process and its impact on the use of PMSs in the public sector.

The literature increasingly revealed involvement of lower level employees, citizens and other external stakeholders in strategic planning process (Poister and Streib, 2005; Wairimu and Theuri, 2014). Reid *et al.* (2014) emphasised the importance of employee engagement during strategic plan development and implementation stage. Similarly, Wairimu and Theuri (2014) emphasised the importance of employee engagement as one of the key factors in realisation of strategic plans through employees' understanding of the pertinent strategic issues, their commitment to the attainment of the strategic goal and objectives and setting their own individual targets in line with the overall organisational and divisional objectives. This suggested that employee engagement in the

development of the strategic plan ensured that everyone is on the same page and that employees' performance was measured against how their work fitted into accomplishing broader organisational goals and priorities.

Instead of focussing on the employees, Whelan and Sisson's (1993) focussed on the active involvement and commitment of the leaders in the strategic planning process who were considered to make the strategic planning more effective. They argued that top management needed to drive the entire process to maintain focus, direction and ownership of the planning process. Nonetheless, their study stressed the importance of effective communication of strategic plan throughout the organisation that helped: clarify organisational priorities; avoid conflicts among divisions within the organisation; and ensure employees commitment to achieving the plan. Similarly, Nieboer (2011) stressed the importance of the ongoing communication of the strategic plan throughout the organisation to ensure that the plan was consistent with the organisation's vision, mission, goals and objectives. This implied that the top management needed to effectively communicate organisation's strategic plan to the employees at all levels to clarify organisational priorities and develop sense of direction. While providing clarity around organisational priorities, effective communication provided clarification on how the employees work fitted into the big vision of the organisation.

Thus, this study focused on the involvement of lower level employees in the development of strategic goals and objectives. The employees who felt empowered to participate in strategic planning process naturally felt more engaged because they had a voice in deciding which direction the organisation will go. This empowered voice created a strong alignment across all levels of the organisation and created shared understanding around organisational purpose. The employees' involvement in the strategic planning process emerged from individual professionals and thus reflected the normative isomorphism in Case A. Based on this argument, this study examined the impact of the employees' engagement in the strategic planning process on the use of the OBPM system.

2.4.2 Employee Engagement in the design of KPIs

Employee engagement in the development of KPIs is a topic that is increasingly examined in the management accounting literature. Prior studies demonstrated that employee participation in the design of KPIs provided several benefits. However, these studies have specifically focused on the performance effects of employee engagement in the development of KPIs and suggested that employee engagement was positively related to employee and organisational performance (Wouters and Wilderom, 2008; Groen *et al.*, 2012). None of these studies provide insights as to how employee participation in the development of KPIs influenced the use of OBPM in the public sector.

Thus the current study contributes to the existing PMS literature by investigating how employee engagement in the design of KPIs shaped the use of OBPM in the public sector. In particular, this study contributed to the existing literature by investigating the existence of normative isomorphism in Case A through the involvement of employees' in KPI development.

Lauriks *et al.*, (2012) and Karami (2017) highlighted the importance of quantitative and qualitative KPIs including its ability to evaluate progress of the organisation towards the attainment of its planned goals and objectives, improve performance, increase accountability and transparency, measure the effectiveness of the program and provide stakeholders with a measure of degree of achieving desirable outcomes. Baranova *et al.*, (2014) asserted that KPI was an important aspect of the strategic planning process through which an organisation established its strategic priorities and then selects the accountability and operational KPIs which best reflected the strategic priorities. Groen *et al.*, (2012) stated that it remained the task of top management to maintain congruence between the KPIs and the organisational strategic priorities. The authors asserted that managers preserved this congruence by aligning strategic priorities and with the co-developed accountability and operational KPIs.

Groen *et al.*, (2012) examined the impact of involving employees in the development of operational performance metrics on the employees' job performance. They specifically looked at how employee participation improved managers' perceived quality of operational performance metrics and how, in turn, managers used such metrics to elevate employee job performance. In other word, if managers perceived that the quality of KPIs were likely to increase when they develop the metrics together with employees, they were more likely to use the metrics for various purposes, such as evaluating purposes, monetary compensation and nonmonetary rewards. They described employee engagement as the extent of influence employees feel they have had on the design of the performance metrics, particularly on the development of all aspects of performance metrics during all the phases: design, implementation, and maintenance of the metrics. They argued that employees needed to be involved in the development of KPIs to prevent the risk related to the imposition of metrics that poorly reflected the operational characteristics of their work.

Employee engagement in discussion and design of performance indicators resulted in clear-cut ideas and better insights in what employees have to do, how they can do what they have to do and how their work fitted into the big picture. For example, Likierman (1993) suggested that the KPIs needed to be devised with people on the ground, who should feel ownership and the sense of ownership resulted in full commitment and better understanding of what was expected of the employees and how they were decided. This suggested that the development of KPIs was a negotiating process and

involved staff further and further down the organisation. Consequently, knowing what to do and how to perform the tasks effectively had a positive impact on productivity and performance of an organisation as a whole. Furthermore, a bottom-up approach enabled employees to provide their input in defining their responsibilities and the associated KPIs for the measurement of those responsibilities resulting in full commitment from employees and achievement of the desired outcomes. However, it is noted that adopting a full participation approach in each and every unit may not be feasible, providing an opportunity to employ a different procedures, such as having representatives from each unit participate in all stages of KPI development or having each unit participate in developing some part of the key result areas or KPIs.

The literature suggested that as effective participants in the design of KPIs, employees felt empowered and understood their ideas were an important contribution toward the success of the organisation, leading to increased job satisfaction and a positive attitude toward their work, larger performance increase which in turn impacted on the use of OBPM system. The employees' involvement in the design of KPIs emerged from individual professionals that reflected the normative isomorphism in Case A. Based on this argument, the study examined the presence of normative isomorphism via investigating the impact of the employees' engagement in the design of KPIs on the use of the OBPM system.

2.4.3 Employee engagement in design of Performance Management Information Systems

Employee engagement in the design of PMS is receiving increasing attention in the PMS literature. Prior studies demonstrated that employee participation in the design of PMS led to higher level of performance (Kleingeld *et al.*, 2004; Mone and London, 2010; Smith and Bititci, 2017). However, these studies have specifically focused on the employee engagement in the design of performance appraisals, which is a subset of the overall PMS and primarily focused on establishing performance goals for employees', performance appraisal, and providing feedback and development opportunities (Gruman and Saks, 2011). In a similar vein, Kleingeld *et al.*, (2004) emphasised that employee engagement in the design of PMS fostered performance improvement, including the cognitive and motivational benefits of high participation.

There is limited literature on the effect of employee engagement in the design of PMSs on use of OBPM in the public sector. For example, Tung *et al.*, (2011) examined the effect of lower level employees' participation in the design of PMS on the effectiveness of PMSs. Their study highlighted positive relationship between employee participation and the effectiveness of PMSs. Similarly, Sole (2009) asserted that the involvement and motivation of employees during the design of PMSs had a

great impact on its success. He highlighted that employee engagement encouraged employees' accountability, learning, motivation and contribution to solutions.

Along these lines, the current study contributed to the PMS literature by examining the impact of employee engagement in the design of PMSs on the use of OBPM system in the public sector. The employees' involvement in the design of OBPM emerged from individual professionals that reflected the normative isomorphism in Case A. Based on this argument, the study examined the presence of normative isomorphism via investigating the impact of the employees' engagement in the design of the OBPM system in the case organisation.

2.4.4 OBPM Information System Capabilities

Prior studies identified the information system capabilities as a critical factor influencing the success of PMSs. These studies indicated that the information system problems represented a major impediment or posed obstacles to the successful implementation of PMSs (Cavalluzzo and Ittner, 2004; Uppatumwichian 2013; Primarisanti and Akbar, 2015; Lewis 2015; Ping *et al.*, 2018). Conversely, Krumwiede (1998) and showed a positive association between the strength of the information systems and successful implementation of PMSs. None of these studies have provided mixed evidence on the influence of information system on the use of OBPM. That is, none of these studies have demonstrated both the positive and negative influence of the existing information system on the use of OBPM in the public sector. Thus the current study contributed to the existing PMS literature by providing mixed evidence on how the information system capabilities shaped the use of OBPM in the public sector.

Krumwiede (1998) posited that the successful implementation of PMSs was a function of the information system capabilities. He asserted that the organisations with higher quality and more sophisticated information systems were able to implement new measurement system more easily due to lower measurements costs. This resulted in positive relationship between information system capabilities and implementation success.

However, Cavalluzzo and Ittner (2004) identified that technical issues including compatibility of the new system with the existing systems, system complexity and the system's relative improvement over existing systems created major impediments to the successful implementation and use of PMSs. They highlighted that most of these technological issues were related to the inability of existing information system to provide required data in a reliable and cost-effective manner. In a related vein, a study undertaken by Uppatumwichian (2013) and Ping *et al.*, (2018) highlighted that information technology limitations such as an improper enterprise architecture design between the

ERP system and Business Intelligence (BI) caused BI use such as online analytical processing, data mining and, data warehousing less effective. As a result, the organisations could not produce useful information, support business processes, improve business decisions and performance.

DiMaggio and Powell (1983) argued that when organisations experienced environmental uncertainty such as the limitation in information systems, they were more likely to mimic other successful organisations, and this reflected mimetic isomorphism in the public sector. Hence the current study contributed to the PMS literature by providing insights into the existence of mimetic isomorphism in Case A and whether the case organisation tried to mimic other government agencies by adopting their PMSs. This study also investigated the impact of the information system capabilities on the use of OBPM.

2.4.5 Employees' know-how and their understanding of KPIs

The literature review revealed that limited prior research has been conducted in relation to the two factors that may impact on the use of OBPM in the public sector, namely: employees' know-how and employees understanding of KPIs. This study highlighted new insight into the effect of employees' know-how and their understanding of KPIs on the use of OBPM in the public sector. As such this study facilitated individual understanding of the effects of these factors on the use of OBPM in the real-life context. It is suggested that employees who have strong understanding of KPIs and have OBPM-related expertise would have an impact on the use of system

2.4.6 PMS-related training

Wexley (1984, p. 13) defined training as "a planned effort by an organisation to facilitate the learning of the job-related behaviour". A number of studies highlighted the importance of training in relation to development and successful implementation of PMSs. For example, Tung *et al.*, (2011) identified that the organisations that provided appropriate training with respect to the use of PMSs across different business levels were able to enhance the knowledge and skills of employees in developing, implementing and using the PMSs systems and were able to achieve the desired staff-related outcomes. Their findings were consistent with the prior findings of Harel and Tzafrir's (1999) who suggested that the organisations who provided training to their employees sustained competitive advantage by transferring knowledge information and power to them.

Similarly, Emerson (2002) identified training as a critical factor in maintaining the usefulness and the effectiveness of PMSs. He concluded that training allowed users to understand performance measurement concepts and principles, which in turn, equipped both employees and managers to operate the system successfully. Primarisanti and Akbar (2015) also claimed that PMS-related training allowed government employees to understand, accept and feel comfortable with the system

and alleviated depressed feelings or confusion among the employees resulting from the implementation process. In addition, their study found that the training for the organisational personnel improved the communication among divisions and departments about public services, performance, and PMSs. They concluded that the number of personnel who were able to understand the performance measurement process both quantitatively and qualitatively had an impact on use of the system.

Cavaluzzo and Ittner (2004, p. 249) asserted that the provision of training resources provided an indication that the organisation was providing adequate resources to support the implementation and use of PMSs, and thus pointed to management support for the innovation. The authors argued that insufficient training resources led to the failure in undertaking normal development procedures and thus increased the risk of failure of the system.

This indicated that PMS-related training enabled users to understand the purpose and functioning of the system and as such they were more likely to commit to it and thereby enhancing the likelihood of achieving the desired results. From this viewpoint, the study contributed to the literature by providing empirical evidence on the impact of OBPM-related training on the use of OBPM in Case A. The training reflected the normative isomorphism in government agencies. Based on this, the study examined if normative isomorphism existed in Case A through examining the effect of OBPM-related training on the use of OBPM in case organisation.

Based on this argument, the study examined the impact of normative isomorphism on the use of OBPM in Case A via investigating the employees' engagement in strategic planning, design of KPIs and OBPM systems, employees' knowledge and competence and their understanding of KPIs and PMS-related training.

2.4.7 Employee perception of usefulness and effectiveness of OBPM

The literature highlighted the importance of gaining real understanding of the employees' perception of the usefulness and effectiveness PMS (PMSE) as it contributed to the designing, employees being productive and showing approval towards the system and effective implementation of PMS, which in turn, contributed to the success of the organisations (Haines and St-Onge, 2012; Mishra and Farooqi, 2013; Dewettinck and vanDijk, 2013; Wendt, 2014; Blizzard, 2014; Sharma *et al.*, 2016; Makhubela *et al.*, 2016).

Sharma *et al.*, (2016) posited that PMSE was conducted through employees' perception of PMS accuracy and fairness and how well PMS operated as a tool to meets its intended objectives. Their study contributed to the body of knowledge by providing a theoretical framework related to

employee perception of PMS effectiveness and a scale to measure employee perception of PMS accuracy and fairness. Similarly, Dewettinck and Van Dijk (2013) and Haines and St-Onge (2012) studied the effectiveness of PMS by focussing on performance reviews a scale that measures positive performance measurement outcomes.

The limitations of these studies were that they confounded employee perception of the effectiveness of PMS with performance reviews and appraisals which are the subsets of overall PMS. While the previous studies focussed on the subsets of the PMS, the present study contributed to the existing literature by providing an insight into employees' perception of the usefulness of the overall OBPM. The current study identified that employees accepted their OBPM if they perceived that the usefulness of the system is related to the factors such as attainment, monitoring and reporting of organisational long-term strategic and operational goals and objectives, decision-making, and performance improvements.

Padovani *et al.*, (2010) provided insights into PMSE by examining PMS as a management tool and focussed factors namely, validity, legitimacy and functionality. Validity included dimensions like PMS's ability to align performance measures with mission statement and clear objectives, track performance, measure quality of programs and services; report on performance. Legitimacy entailed seeking input from lower level employees and involving them in the development of performance measures to seek their support. Functionality focused on the beneficial effects of PMS. De Bruijn (2002) highlighted that PMS's functionality included its ability to achieve goal and objectives, promote accountability and transparency, facilitate performance improvements and decision-making. Likewise, Streib and Poister (1999) and Bouckaert (1993) highlighted spectrum of levels of effectiveness of PMS using the abovementioned dimensions and subsequent sub-dimensions.

Researchers have used various constructs to define broader perspective on the effectiveness of PMS. Table 3 illustrates the key attributes of an effective PMS.

Table 3: PMS effectiveness: key components

Components	Literature
<p>Strategic Set strategic goals/objectives Achieve strategic business goals and objectives</p> <p>Promote accountability and transparency Do the right things in the right way, that is, effective in meeting its intended objectives</p>	<p>Buick <i>et al.</i>, (2015); Verbeeten and Spekle (2015); Biron <i>et al.</i>, (2011) Wojtczak (2002); Erlendsson (2002) Lewis (2015); De Bruijn (2002) Drucker 2006</p>
<p>Analysis and Reporting of Performance Track performance overtime, measure quality of service delivery and analyse and report on performance data</p>	<p>Verbeeten and Spekle (2015); Bouckaert (1993, p.31)</p>
<p>Decision-making Improve quality of decision-making made by top management and customers; appropriate allocation of resources</p>	<p>Blackman <i>et al.</i>, (2013) Padovani <i>et al.</i>, (2010)</p>
<p>Performance improvements Stimulate better service delivery</p>	<p>Lewis (2015); De Bruijn (2002)</p>

Developed for this study

McAdam and Walker (2003) stated that an effective PMS was dynamic and was considered as a living and changeable system. This involved continuous refinement to PMS that aimed at improving the system. On the other hand, Padovani *et al.*, (2010) used factors such as duration of PMS to measure the effectiveness of PMS. The authors suggested that the duration of around five years is enough to have an effective PMS in place.

Thus, it was imperative to understand employees' perception of usefulness and effectiveness of OBPM, which affected employees' behaviour, including their acceptance and contribution towards the system. The employees' perception emerged from individual professionals so it reflected the normative isomorphism. Therefore, this study aims to investigate the presence of normative isomorphism in Case A through the role of employees' perception of the usefulness and effectiveness of the OBPM on the use of the system.

2.5 Impact of organisational culture on the use of OBPM

2.5.1 Conceptualisation of Organisational Culture

Denison (1990, p. 2) defined organisational culture as “the underlying values, beliefs, and principles that serve as a foundation for an organisation's management system as well as the set of management practices and behaviours that both exemplify and reinforce those basic principles”. Sebastiao *et al.* (2017) highlighted that organisational culture was created and maintained by the organisation's dominant coalition and the functional systems and affected by its social values and the macro environment. Therefore, organisational culture was represented by organisational structure, system and strategy, as well as, the leadership.

Many researchers have extensively studied the concept of organisational culture (Denison, 1990; Kotter and Heskett, 1992; Ogbonna and Harris, 2000; Chan *et al.*, 2004; Deshpande and Farley 2004; Forte *et al.*, 2016). Such studies focussed on the influence of organisational culture on business performance generally. Of importance to this research were the studies that attempted to examine the extent to which the organisational culture impacts on the effectiveness of PMS (Sole 2009; Baird *et al.*, 2012). Similarly, the current study included organisational culture as a factor that shaped the usage of OBPM in the public sector.

2.5.2 Performance management culture

The limited literature on the effect of performance management culture pointed to the need for an investigation of the impact of performance management culture on the use of OBPM in public sector. Sole (2009) examined the effect of performance management culture on the design and use of PMSs in public organisations through analysing the main factors driving PMS and analysed the characteristics of PMSs in public organisations. Sole's study was conceptual in nature, that is, he carried out a literature review to examine the effect of performance management culture on the design and use of PMSs in public organisations. Similarly, the current study is an attempt to empirically examine the role played by the performance management culture on the use of OBPM in Case A and thus validate or refute the theoretical claims of Sole (2009).

Thus this study examined the impact of performance management culture that encompassed commitment to certain core values of such political leaders, senior executives and staff commitment to performance, results-focussed culture; performance-driven behaviour; regular review of performance; well-developed IT systems including data warehouse that housed real time and user-friendly performance data; accountability; and transparency. Performance management culture emerged from norms, values, behaviours and expectations that dictated the way an organisation functions. From this perspective, normative isomorphism took place in the government agencies.

Along these lines, the current study examined the presence of normative isomorphism in Case A and its impact on the use of OBPM in Case A, which assisted organisation in defining strategic goals and objectives and KPIs; delivery of health services and programs; monitoring and reporting of performance results; and rewarding performance.

Sole (2009) found that performance management culture as part of overall organisational culture exerted influence on PMSs. That is, performance management culture was found to be a critical factor for improving the effectiveness of PMS. In his study, the performance management culture encompassed:

- a focus on the end results for users and citizens;
- employees' empowerment in taking responsibilities without fear of blame; and
- a positive approach to performance management by considering it as a tool for improvement and not merely a form-filling exercise.

Sole (2009) provided insights into the effect of performance management culture on the implementation of the performance management process in terms of the different stages of the PMS including:

1. Planning (strategic level, operating level, team and individual level);
2. Resource allocation (Budgeting)
3. Strategy implementation (Delivery of services)
4. Internal and external reporting
5. Evaluation

This study aims to examine the role played by performance management culture in encouraging results management regimes, which in turn, affects the use of OBPM in Case A. Mayne (2008) asserted that many organisations these days have put in place a number of results-related systems which focussed on the empirical evidence on the results—outputs and outcomes—it is seeking to achieve. His study showed that the commitment and support from senior management leadership helped build results management regime. The study also found that senior managers provided oversight of the results management regimes through:

- Agreeing a results framework for the organisation, and results frameworks for programs and policies;
- Requiring that planning, budgeting and reporting be results-based.

- Using results information in approving programming decisions and for holding managers to account; and
- Reporting on organisational performance.

Baird *et al.*, (2012) examined the results-related system through outcome-oriented PMS. The authors described that the outcome oriented organisations were performance-oriented that emphasised on action and results, demonstrated high expectations for performance and were competitive. In their study, the authors indicated that outcome-oriented organisations were comprised of employees' who were motivated, were likely to apply maximum effort to their work, had higher level of commitment to their organisations and had greater work-related effort.

Ho (2005) examined results based regime through the output-based PMS. He highlighted that output-based PMS focused on efficiency measures such as the quantity of services. The author asserted that output-based PMS informed citizens about how their tax money was spent, what the money was spent for, and whether it was spent well, and thus enhancing the impact of performance measurement on budgetary decision-making. Jalaludin and Nabiha (2018), however, indicated that output-based PMS had limitations as it only focused on quantitative information including the number of outputs produced and services provided. The authors suggested outcome-based PMS as a better system portraying the overall organisational performance.

This study also suggested that performance management culture encouraged regular measurement and reporting of organisational and individual performance, which in turn, affected the use of OBPM in Case A. Jalaludin and Nabiha (2018) highlighted that PMS was generally concerned about regular measurement and reporting of performance for programs, organisations or individuals in the public sector. They highlighted that output-based PMS was utilised to get tasks completed while the outcome-oriented PMS provided the end results, which reflected the value on final users. The authors described that output-based PMS explained how much was being produced and OBPM emphasised actions and results and reflected the value on final users. They explained that the term output literally referred to work done often in terms of product produced or service while outcome measures emphasised on achievements in relation to citizens' interest and referred to the consequences of the outputs.

The current study suggested that performance management culture encouraged the use of Activity Based Costing/Budgeting (ABC/B) which in turn affected the use of OBPM in Case A. Previous studies demonstrated that ABB supported improvements in performance (Muras *et al.*, 2008; Lin and Yahalom, 2009). Similarly, this study examined the effects of ABB on the performance improvements

and which indirectly affected the use of OBPM. Muras *et al.*, (2008) highlighted the significance of ABC/B, which provided an excellent operational/bottom-up view by effectively allocating cost to activities and outputs. That is, the authors emphasised that ABC/M supported the performance management processes in the organisations through: the identification of the real cost of business processes and activities based on the resources consumed; establishment of a cost structure that provided the transparency necessary to effectively manage business processes; identification and management of non-value adding processes; establishment of a robust platform for output pricing; and improvements to business processes, systems and existing work practices that reduced costs and improved service delivery performance.

Similarly, Lin and Yahalom (2009) examined the role of BSC and ABB in helping the organisation reach the performance target that BSC sets. In their study, the authors highlighted that ABB is essential to good performance, particularly, when it provided efficiency measurements to assure that the operation is on track to enhance performance. That is, in order to evaluate the overall performance of their Keelung Harbor case study, the authors designed an evaluation system that integrated balanced scorecard with activity-based budgeting to control cost and examine the achievement rate of target performance. Their study indicated that an organisation's target and resources were integrated by employing the BSC and ABB systems.

This study also suggested that performance management culture encouraged the use of incentives, which had significant positive impact on employee performance and indirectly affected the use of OBPM in the case organisation. It is suggested that public sector agencies used PMSs to define performance goals which enabled employees to understand what their organisation is trying to accomplish and how their work efforts contributed to the success of the organisation. The performance goals had KPIs to track performance. Employees performed better when there are performance goals and got rewarded for better performance. In other words, incentives triggered better performance which in turn affects the use of PMS in the public sector.

Risher (2002) discussed the link between performance and rewards in the public sector. The author asserted that new focus of PMS on results, outcomes and accountability made performance more prominent which started from elected officials, managers and eventually trickled down to employees. He found that rewards triggered better performance, especially financial incentive reinforced good performance among employees, enabled employees to recognise their value and contribution and helped them to focus. In his study, Risher highlighted that employees were rewarded for their contribution towards achieving organisation's mission and for acquiring the competencies that truly made a difference on achieving results and thus shaping the use of PMS.

However, Risher discussed the key issues affecting the incentive systems in the public sector. He highlighted that the public sector was characterised by the predominance of performance-insensitive pay increases. For instance, financial incentive system was less effective in the public sector resulting in traditional automatic pay increases within the employee's classification level.

Similarly, a study undertaken by Baird *et al.*, (2012) exhibited a significant association between link of performance to rewards and the effectiveness of PMSs. The study showed that the link of performance to rewards was significantly associated with both the performance related outcomes and staff related outcomes in the Australian local government. Their findings suggested that staff increasingly worked towards pursuing organisational objectives when they saw positive impacts of rewards on performance. Their finding was consistent with the literature advocating the positive impact of rewards on employee performance.

This study investigated the effect of incentives on the employees' job performance which indirectly influenced the use of OBPM in Case A. The use of incentive emerged from organisational policies to encourage individuals' job performance in the organisation and thus it reflected the normative isomorphism in government agencies.

2.5.3 Culture of communication

Prior studies established that effective communication between management and employees helped boost employee engagement, provided guidance to the employees on the future direction and enabled employees' to understand how their roles fitted with the overall organisational mission and strategic objectives (Muras *et al.*, 2008; Marrelli's, 2011; Nankervis *et al.*, 2012; Armitage and Parrey, 2013). For example, clear and ongoing communication helped: strategic alignment which ensured that everyone was moving in the same direction; provided an understanding of what should be measured to determine if the organisation is meeting its goals; and employees understood the values of PMSs which resulted in acceptance by employees of the system in recognising that PMS led to continuous performance improvement.

Effective communication also contributed to employees understanding on what the organisation was focussed on and how what they do was worthwhile and was linked with higher level priorities; recognise employees' accomplishments; translated organisational goals and objectives into individual performance objectives that was squarely tied to organisation's strategic priorities and KPIs. This increased the credibility of OBPM when every employee, every team and every business units could relate individual performance to the much larger picture of the organisation. Clearly communicated goals and priorities of the organisation generated high organisational performance. Similarly, the current study examined the effect of regular communication between managers and

the subordinates about the OBPM on the use of OBPM. The study also examined the role of communication in creating shared understanding and the effect of shared understanding on the use of OBPM.

2.5.4 Culture of shared understanding

This study suggested that open and transparent communication between managers and employees about the aims and purposes of PMS created shared understanding. Shared understanding assisted the individuals to work towards the shared meaningful organisational objectives and ensured that everyone gets on the same page (Carine *et al.*, 2014). Thus shared understanding about the organisational goals and objectives affected the use of OBPM. Two-way communication between the managers and the employees helped:

- create shared understanding
- clarify expectations about the roles and accountabilities
- communicates the functional and organisational goals
- aligns individual employee's day to day actions with strategic business objectives
- provides a regular and a transparent feedback for improving both organisational and employee performance.

Earlier research on shared understanding showed that shared understanding amongst key stakeholders created strategic alignment resulting in highest levels of effectiveness of the PMSs. For example, Collings and McMackin (2017) suggested shared understanding of the aim of PMS amongst key stakeholders such as managers and employees as one of the fundamentals of effective PMS. With their study, they argued that clear shared understanding of the purpose of PMS led to strategy alignment and implementation through aligning the work of the employees with the broader objectives of the organisation. The study highlighted that the direct link to the organisational strategic priorities enhanced productivity and employees' performance in the organisations. They highlighted that the organisation with the greatest shared understanding and clarity of aim and priorities of PMSs were the ones with most effective PMS and had satisfaction with the process. They argued that clarity and shared understanding of the purpose of PMS among the key stakeholders in the process optimised the return on the investment in PMS. This implied that clear communication about the aims and objectives of PMS and strategic business objectives created strategic alignment, shared understanding and enabled organisation as a system to work together in an integrated fashion for accomplishing prime output/outcomes results.

Mulder *et al.*, (2004) emphasised the importance of communication in creating and reaching the process of shared understanding. That is, they pointed out that feedback in communication process

was necessary for reaching shared understanding. They labelled feedback as both questioning and learning. This indicated that feedback mechanism enabled listeners to understand better when they received more feedback and which contributed to reaching shared understanding. This suggested that feedback in communication process facilitated questioning and learning and two-way sharing of information and development of shared understanding amongst the managers and employees.

Similarly, Hinds and Mortensen (2005) identified that communication contributed to the healthy functioning of the geographically distributed teams by creating stronger shared identity and more shared context. The shared identity and shared context moderated the relationship between distribution and conflict. They indicated that communication moderated effect on the conflict prevalent in the distributed teams by facilitating conflict identification and conflict management. They argued that communication had a direct effect on a team's ability to establish and maintain a shared identity, build social ties, increase awareness and strengthen interpersonal bond between distant workers. They suggested that communication was particularly important for distributed teams as a means of preventing and ameliorating conflict. They also found that an unshared context was particularly detrimental to distributed teams.

On the other hand Kleinsmann (2008) investigated the barriers that influenced the creation of shared understanding between actors from diverse groups. Kleinsmann found disconnection from peers due to less contact between the departments as one of the barriers which complicated communication between the actors from diverse groups. Thus, this hampered the achievement of shared understanding between the departments. This suggested that the management's failure to foster cross-functional communication and relationships led to increase in the gap between the departments, disconnection from co-workers and lack of shared understanding between the actors from diverse groups.

In addition, Karagoz (2017) found lack of time as a major barrier to knowledge sharing, which hampered the development of shared understanding. The findings also indicated diverse culture had negative impact on the creation of shared understanding. The results indicated a "silo organisation" where people from different departments often worked in isolation and frequently felt little need to share knowledge outside of their domain. The author asserted that those working in silos demonstrated isolated performance, diverted the flow of information, hoarded knowledge or played ignorant. As a result, the findings revealed diminished performance, which further resulted in fragmentation between functions and business units. This indicated that the corporate culture did not provide sufficient support for knowledge sharing practices and was considered as one of the major drivers inhibiting shared understanding in the organisation.

Similarly, Vangen (2017) examined communication and shared understanding in public sector organisations which were increasingly culturally diverse and stemmed from distinct professional and organisational culture that had to be navigated and managed. In his study, Vangen defined culture in terms of practices and ways of doing things, values, interpersonal behaviours, organisational practices and languages which influenced individuals' perceptions, actions and behaviours in organisational settings. He defined diversity with reference to professional cultural attributes such as skills, experiences, expertise, language, vocabulary and style of communication. Vangen argued that cultural diversities significantly influenced communication and shared understanding causing conflicts, lack of shared understanding or misunderstandings and differences in ways of communication in organisations. He stated that in culturally diverse organisations the language of communication required extra effort and care. He also highlighted that managers invested time and resources to gain better understanding of and deal appropriately with cultural issues affecting communication and shared understanding. These included formal information gathering, visits and networking, all aimed at enabling managers to learn about the cultural diversity and how to deal with the associated cultural issues.

The current study investigated the effects of shared understanding on the use of OBPM in the case organisation. This study contributed to the literature by empirically analysing the barriers to shared understanding that impacted on the use of OBPM, so far lacking in the literature.

2.5.5 Culture of Silo

Hotaran (2009) suggested that silo is formed when communication as a whole is not fostered and encouraged, when the focus is on my department mentality, departments work in isolation, goals are kept on an individual department basis which resulted in cross-functional issues and destabilisation of the operation of the business. This suggested that the lack of cross-departmental communication and shared understanding resulted in silo culture. Hotaran suggested that silo culture reflected negatively on organisations where nobody is on the same page and resulted in subsequent inefficiencies due to different departments working with different understandings. Syverson, (2011) highlighted that silo culture was seen as a negative organisational barrier that thwarted aligned vision, common goals and objectives and cross functional collaborations, which had negative impact on workflow, performance and the use of PMS in the organisations.

Cilliers and Greyvenstein (2012) identified that silos fragmented organisations resulting in parts of organisations function in a manner disconnected from the others. This resulted in the left hand not knowing what the other is doing leading to a lack of systemic thinking and loss of the vision of the larger organisation that created feeling of stuckness, isolation and powerlessness, lack of trust,

respect, collaboration and collegiality. The authors argued that the silo barriers created an 'us and them' mentality which made boundary crossing difficult. The various parts of the organisation become delineated to the extent that those inside felt threatened by those outside the silo barrier and view them with suspicion, fear and contempt. The authors suggested that a culture of communication needed to start from the very top and trickle down to the rest of the organisation to address the silo effect. This implied that silo mentality was formed because of the lack of communication between departments resulting in inefficiencies in overall operations, a lack of trust between departments and thus exerting negative impact on the performance and the use of PMS in the organisation.

Similarly, Mohapeloa (2017) explored the effects of silo when different units as components of an organisation failed to integrate, collaborate and work together to achieve common goals and objectives. Their study revealed negative effects of silo mentality on the business model used by their case organisations. The study found that the absence of teamwork within divisions led to conflicts and delays in the achievement of common goals. The lack of integration and collaboration among divisions affected inter-divisional progress, relations and compromised the quality of service. The author argued that silo mentality undermined internal capabilities, key resources, weakens firm's capability and growth and destroyed any value created by the firm. This suggested that silo mentality was often the result of poor communication, lack of shared understanding or a lack of awareness within the organisation. The lack of cross-departmental communication negatively impacted workflow, as information did not pass freely across the organisation.

Although there are few studies on the effects of silo mentality on the overall performance of the organisation, the research on the impact of silo culture on the utilisation of OBPM was not clearly presented in the literature. This study identified the causes of silo culture and the impact of silo culture on the use of OBPM in the state government agency.

2.5.6 Culture of Social Networks

Previous studies have shown that organisations are increasingly using social networks to gain corporate benefits such as improved communication, cross-functional collaboration, increased productivity, accelerated problem solving, knowledge sharing, innovation, access to resources, better understanding and management of the internal relations of its employees (Kyvik, 2012; Grills *et al.*, 2012; Chin *et al.*, 2015). While these studies have recognised the importance of social networks and have emphasised on factors influencing the implementation of social networks at the workplace, the question of how social networks affected the use of OBPM in the public sector had to be addressed.

Chin *et al.*, (2015) found that social networks had positive impact on organisational communication processes, information sharing and socialisation. The study found that the likely usage of social networks was significantly influenced by the technological, organisational, social and individual factors. For instance, the key success enablers that influenced social networks included: organisational factors such as top management commitment, reward systems, policy; technological factors such as ease of use, integration with existing system; accessibility; social factors such as sense of connectedness, reciprocity; supportive community members; and individual factors such as enjoyment of helping others; reputation; and sociable personality. The study also found inhibitors that had negative effect on the use of social networks including technological inhibitors such as limitation of platform features, competing technologies and confidential information leakage concerns. Organisational inhibitors included lack of top management involvement, lack of well-defined purpose, lack of enforcement, lack of alignment with key performance and geographical distance. While social inhibitors comprised of lack of feedback from others, irrelevant information; individual inhibitors encompassed lack of time, lack of social network skills and lack of knowledge and self-efficacy. This suggested that social networks were considered an important tool for communication and knowledge sharing processes. The existence of inhibitors implied that social network was less effectively used to realise its expected benefits. To mitigate the identified inhibitors, the organisations required the adoption and implementation of successful strategy on the use of social networks.

Similarly, Grills *et al.*, (2012) revealed the enabling factors that held the social networks together including common faith, common friendships and geographical location and common mission. Self-interest of the members such as seeking funds, visibility, credibility, increased capacity and access to trainings were also identified as a motivating factor for networking. The study also identified barriers to network such as lack of funding, poor communication, limited time and lack of human resources. Risk aversion and mistrust remained significant barriers to overcome for such networks. This implied that the key success factors enabled the social networks to be effective at creating collaborative opportunities, increasing access to resources, funds and training and increasing visibility and confidence of the network members. However, significant barriers preventing the network from being fully effective needed to be addressed.

Kyvik (2012) used Norwegian research universities as a case and examined six tasks related to the academic researcher's role including social networking. Kyvik's study revealed that social networking facilitated frequent communication within networks of people in or across research specialities and allowed exchange of ideas, knowledge results or information among the academic staff. Social networking was considered as a first step towards closer working relationships and research

collaboration with other scientists which enabled them to advance knowledge, access information and answers from fellow colleagues and peers. This implied that cultural factors such as social networking provided great opportunity for interconnectedness through collaborating and connecting with others in the network and established interpersonal relationship, allowed knowledge sharing and problem solving.

This study addressed the issue pertinent to the impact of social networks on the use of OBPM and proposed recommendations that the organisation needed to implement to leverage the use of social networks that may impact on the use of OBPM.

2.5.7 Evaluative and learning culture

Goh (2012) asserted that evaluative and learning culture encouraged the organisation to deliberately seek out information on its performance and use that information to learn how to better manage and deliver its programs and services and thereby improve performance. Goh posited evaluative and learning culture as an important factor that supported effective evaluation and results management regime and effective PMS in the public sector. He also stated that strong evaluative culture involved building a strong learning capacity that encouraged knowledge sharing and learning through experience. Goh pointed out that performance measures were used as an effective tool for learning and evidence-based decision-making in the public sector. However, the author identified traditional norms operating in public bureaucracies including suppression of negative data, staying out of trouble and doing their jobs within a narrow band as fundamental obstacles to PM. It is suggested that utilisation of the OBPM could only be realised in a strong learning and evaluative culture that emphasises on learning from feedback and performance improvements that enables employees to use performance measures for evaluation and future improvement.

Hoole and Patterson (2008) identified evaluation as a contributing factor towards the realisation of the mission and in the development of a learning culture within the three case organisations. The study highlighted that evaluative and learning culture resulted in continuous organisational learning and improvement; resourceful problem solving amongst the staff; recognition of learning focussed approach; creative ways to understand community impact; building relationships; and facilitating organisational development. In their study, Hoole and Patterson asserted that the national organisations funded large evaluation studies and provided evaluation resources, as well as the responsiveness of the external evaluator in providing locally relevant data. The study identified commitment of organisational leadership and the external evaluation expertise as critical factors in transforming the role of evaluation from one of basic reporting and accountability to a continuous

organisational learning approach, providing an infrastructure to support the evaluative and learning and building evaluation capacity.

In a similar vein, Ferguson (2003) examined the evaluation activities undertaken by the Australian War Memorial, which was viewed as an integral part of the organisation. The study revealed ten key success factors that were instrumental in supporting the evaluation activities at the Memorial. For example, the appointment of an internal evaluator and the location of evaluation within the executive area were the structural factors that contributed towards the uptake of evaluation activities. The key success procedural factors included: formal requirement to undertake and use evaluation in projects; reflection on key learnings at the end of major projects; inclusion of evaluation in corporate and business planning processes; the use of Steering Committees to oversee major evaluation projects; and the use of monitoring and performance indicators by senior executive staff. The attitudinal factors included the development of an agreed vision that reinforced the importance of evaluation, evaluation of programs, processes and products and interactive evaluations as a way of increasing ownership of findings and building capacity.

Loud (2014) examined the evaluation process in the Swiss federal administration, particularly, the interrelationship between the institutionalisation of evaluation culture and their importance in providing favourable conditions for enhancing evaluation practice and use. Loud argued that for evaluation to be institutionalised, evaluation practices were to be integrated into organisational framework and legitimised through a legal framework. For example, the introduction of the Constitution's Article 170 provided a general legal framework for the evaluation of federal administration and was considered an external pressure to implement evaluation throughout the organisation. The study revealed that institutionalisation of evaluation was seen as a positive means of supporting results-based management, organisational learning and a culture of evaluation and evaluation thinking. The establishment of internal evaluation services unit also assisted in managing all evaluation-related functions such as evaluation was used as a strategic tool, a learning tool, a source of knowledge and expertise and a tool ensuring transparency.

The evaluative culture was described as an organisational culture that was constantly seeking information on its performance to better manage and deliver programs and services (Ferguson, 2003; Hoole and Patterson, 2008). Loud (2014) defined evaluation culture as a shared set of ideas, values and beliefs at an organisational level about the evaluation's role, functions, practice and use of the knowledge generated through evaluations. For instance, prior studies concluded that evaluation activities were integral part of the organisations and played critical role in the development of a learning culture. While in these studies, the authors presented the characteristics

of evaluative and learning culture and have examined the factors that have supported the uptake of evaluation activities and the development of evaluative culture within the organisations, the key questions pertaining to the impact of evaluative and learning culture on the use of OBPM are still limited in the literature. Therefore, this study empirically examined the effect of evaluative and learning culture on the use of OBPM in Case A. This study also proposed recommendations to alleviate the challenges associated with the development of evaluative and learning culture in the organisation and to enable evaluation to become an institutionalised practice and integrated into Case A's overall organisational culture. This could help report on the effectiveness of case organisation's programs and interventions and thus informed the government and politicians about the effective and efficient use of public funds.

2.6 Impact of leadership and management commitment on the use of OBPM

2.6.1 Political leadership/executive leadership/management commitment

The impact of leadership and top management support and commitment on the use and implementation of PMS has been discussed in a number of studies. For example, Hennessey (1998); Bourne *et al.*, (2002); Pollanen (2005); Sanger (2008); Sole (2009); and Akbar *et al.*, (2012) claimed that leadership and management commitment played crucial role in establishing and retaining a stable PMS. Akbar *et al.*, (2012) examined the implementation of PMS in Indonesian local government (ILG) and found that success of PMS was greatly dependent on internal factor such as management commitment through good leadership. Similarly, Bourne *et al.*, (2002) investigated the success of the redesign of PMSs. They found that top management support was influential in the successful implementation and on-going usage of the new PMS. Emerson (2002) also reported that top management commitment and leadership buy in were key factors in enhancing PMS effectiveness. Similarly, Kennerley and Neely (2002) found that top-level management support was critical for PMS design and implementation. Similarly, the current study empirically examined the impact of political and executive leadership and management commitment on the use of OBPM in Case A.

Tung *et al.*, (2011) examined the impact of top management support on the effectiveness of PMS in Australia. Top management support was measured using a three-item summated including: top management provided adequate resources; communicated effectively; and exercised its authority in support of the PMS. Top management support was found to be associated with the performance-related outcomes. While top management support was found to be a critical success factor for PMS implementation, the findings highlighted the importance of the continued involvement and support from top management. Hence, in order to achieve the desired performance-related outcomes, a

concentrated effort by top management aimed at continuous improvement, open communication and consistent support was required. Top management was therefore encouraged to personally commit to the PMS and ensure that enough time and resources were dedicated on an on-going basis to properly develop and manage the existing PMS.

Similarly, Sole (2009) examined the characteristics of public PMSs and impact of internal factors including top management support influencing the effective implementation of these systems. The study found that effective introduction of PMS required a committed leader with considerable skills, who was willing to provide significant managerial investment and rewards. Sole asserted that leadership was critical in designing and deploying effective performance measurement and management systems. Clear and visible involvement by senior executives and managers was also identified as critical factors for successful performance measurement and management systems. In particular, the study highlighted that internal management commitment enforced formality to the performance management reviews and as a consequence could influence employees' commitment to achieving targets and improving performance. This implied that top management commitment and leadership was one of the most important cited factors shaping the use and implementation of PMSs. The support from top management and leadership were critical to using and implementing PMSs successfully.

Cavalluzzo and Ittner (2004) examined the effect of top management commitment on the development, use, and perceived benefits of results-oriented performance measures in government activities. The study found that top management commitment had significant positive influence on the use of results-oriented performance measures. The study identified strong top management commitment to performance management efforts. The authors argued that top management support for the innovation was crucial for the successful implementation of the PMS systems as these managers could focus on resources, goals, and strategies on initiatives they deem worthwhile. Top management support also created suitable environment for change, influencing users' personal stakes in the system, and increasing the appreciation of others for the potential contribution of the system to meeting organisational objectives.

On the other hand, Chan (2004) examined the use of the balanced scorecard as a performance management system in municipal governments in the USA and Canada. In particular, Chan explored whether the implementation of balance scorecard has been successful in the government sector. The study revealed that inadequate executive sponsorship and management being too busy solving short-term impending organisational problems are other factors which impeded the adoption of the

balanced scorecard and contributed to its unsuccessful implementation in the municipal governments.

Based on the political/cultural framework, Jalaludin and Nabhia (2018) examined the influence of political factor on the utilisation of output-based and outcome-oriented performance measurement in the Malaysian public sector. The study found political factor as a major influence towards the success of any performance measurement utilization in the public sector. The authors argued that the output-based and outcome-oriented performance measurement was influenced by the political process that happened in the organisation and its institutional environment. Organisations were also influenced by requirements of external parties such as elected politicians in the utilisation of PMSs. In their study, the authors stated that a PMS was put in place where there was an appropriate support from elected officials. That is, elected officials exerted their political influence through bureaucratic politics as they represent the citizens who demanded better accountability and service quality. The elected officials were found to have influenced the utilisation of output-based performance measurement in the aspect of resource allocation and program reporting, monitoring and evaluation. Such relationship was expected given that the politicians had received mandate from the people to conduct developments and they were also equipped with power to get resources as well as being accountable towards the people, hence their interest on the respective areas of measurement.

Similarly, Hawke (2012) examined the key factors affecting the success of Australia's public sector PMS. In his study, the author found that Australia's public sector PMS was defined by strong political factor. He defined political factor as the influence of political leaders in power as well those who exerted political influence in opposition. Political factor also encompassed the impact of changes in political power. The study found that influence from political leaders was dominant during the initial establishment phase of PMS. The author argued that PMS in Australia has enjoyed support from all major political leaders. In particular, the establishment of the regime received great support and initiative from political leaders. Since then the political leaders have refined PMS regime that provided a strong and on-going foundation for success. That is, political leaders from both major parties promoted a culture of transparency and accountability for performance and results throughout the last three decades. As such the influence from political leaders has resulted in frequent refinements and changes to PMS regime in Australia.

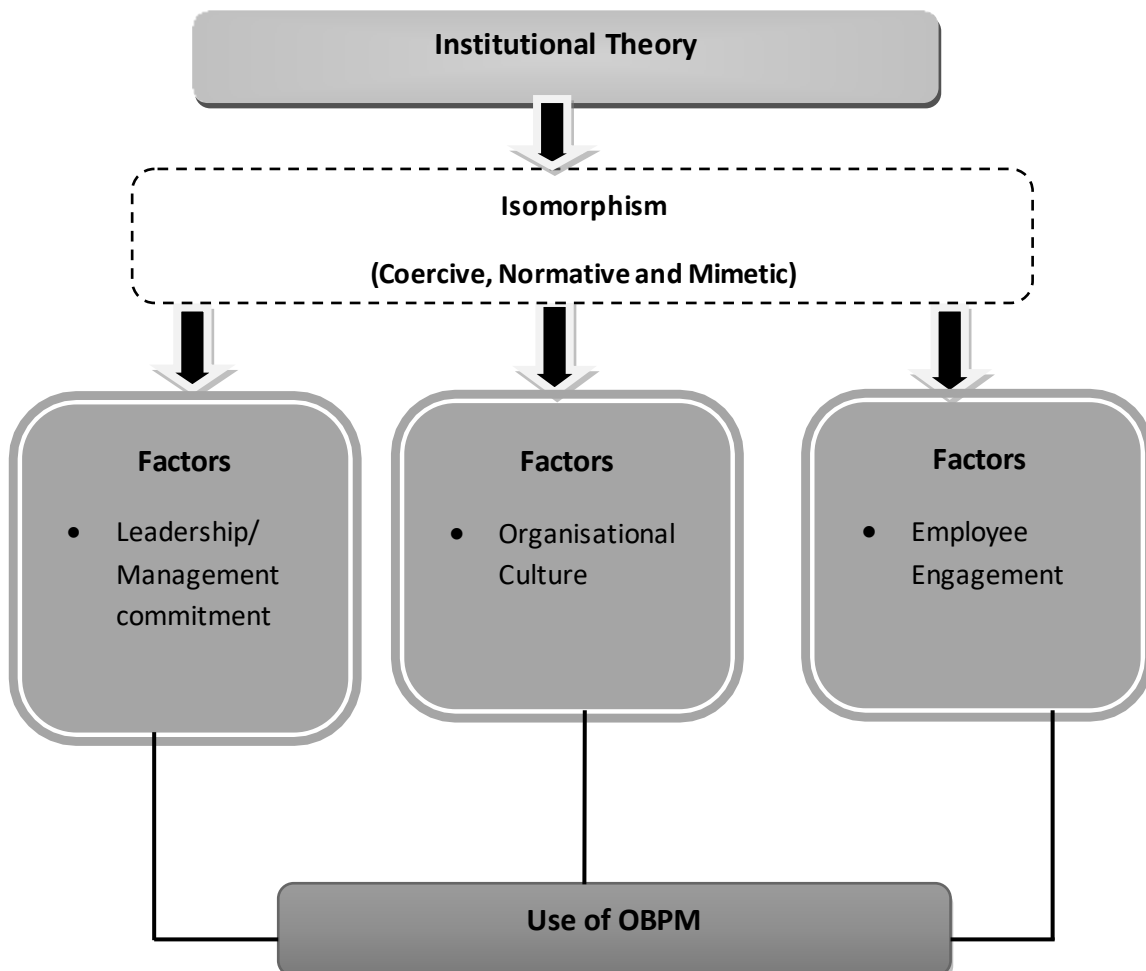
On the other hand, Ho (2005) examined various political factors that influenced mayors' perception of the usefulness of PMS. Ho (2005) surveyed mayors of 11 Midwest cities in the United States to explore how political factor influenced their perception of the PMS. These mayors were selected on

the basis that they had more years of service in government, a better understanding of the operations of departments and more hands-on experience in working with city administrators on various policy and managerial decisions. The author highlighted that concerns related to the political consequences of PMS was a major barrier to the adoption of performance measurement. For example, if mayors believed that PMS could be politicized and caused problems in elections, or if they were concerned about negative media coverage of PMS results or the politicized atmosphere in which citizens or community groups often challenge the city council’s decisions, they were less likely to view it positively in the decision-making process.

2.7 Conclusion

The literature review discussed above led to the theoretical framework presented in Figure 4. The basis of the framework is the idea that the organisations in the public sector need to take into account three internal factors that may impact on the use of OBPM. To accomplish the research objective, one overarching research question and three sub-research questions were developed. The relationship between these is presented in Figure 4.

Figure 4: Theoretical framework and research questions



(Developed for this research)

Given that there is limited knowledge about the characteristics of OBPM in state Government and relatively little is known about the key factors shaping the use of OBPM in state governments in Australia the current study therefore addresses the following research question:

Research Question

How do the internal factors (leadership/management commitment, employee engagement and organisational culture) shape the use of an OBPM in Case A?

The following subsequent sub-research questions have been identified to address the above overarching research question:

RQ 1: How does employee engagement influence the use of OBPM in Case A?

The study examined the following employee engagement factors that influenced the utilisation of OBPM in Case A: employee perception of OBPM effectiveness; employee engagement in strategic planning; employee engagement in the design of KPIs; employee engagement in design of PMS systems; OBPM information system; employees' know-how and their understanding of KPIs; and PMS-related training.

RQ 2: How does organisational culture affect the use of OBPM in Case A?

The study examined how organisational culture affects the usage of OBPM in the case organisation. In particular, the study examined the impact of the following cultural factors on the use of OBM: performance management culture; culture of communication; silo culture; evaluative and learning culture; and other cultural factors such as shared understanding and social networks.

RQ 3: How does the leadership and management commitment shape the use of OBPM in Case A?

This chapter discussed literature review in detail, defined the research question and developed the theoretical framework. The next chapter explains the research method, design and techniques used to undertake this qualitative study.

Chapter Three: Methodology

3.1 Introduction

This chapter builds on the overview provided in section 1.4 and describes the methodology used to undertake research, collect and analyse data to address the research questions. This chapter begins with a justification for the scientific paradigm inherent in qualitative research (3.2), leading into the appropriateness of realism paradigm. Next, the selection of case study research methodology is justified (3.3) to address the research problem identified in section 1.2. Validity and reliability is addressed in the following section and the role of prior theory is presented in section 3.5. In subsequent sections, case selection (3.6); data collection procedures (3.7) and data analysis techniques (3.8) are discussed. The limitations of case study research are then examined (3.9) and ethical considerations are discussed (3.10) before the chapter summary (3.11).

3.2 Justification for the research paradigm

This study used critical realism paradigm that guided the researcher by providing an overall conceptual framework. The conceptual framework which guided the researcher in this study is illustrated in Table 4. Critical realism, has achieved widespread acceptance in the management and business research (Bryman and Bell, 2007). Realism has been identified as an appropriate scientific paradigm for many qualitative research approaches including case study research (Perry, 1998).

This case study research fits within the critical realism paradigm in considering the identification of factors affecting use of OBPM within Case A. According to Guba and Lincoln (1994), the three elements of the scientific research paradigm encapsulated how the nature and form of reality was perceived (ontology); how the world was interpreted and the relationship between the knower and the inquirer (epistemology); and how the knowledge was gained, that is, the technique used by the researcher to investigate the reality (methodology).

Table 4: Realism research paradigm framework

Questions	Position of this Research Study
Ontology	
How the nature and form of reality was perceived?	This study assumed that reality existed and that factors shaping the use of OBPM can be identified, even though these may be imperfectly and probabilistically perceived (Tavana, 2015) by the participants involved. As such multiple sources of data were included in the methodology. Data collection was triangulated i.e. data was collected from the participants via interviews and from various available documents.
Epistemology	
How did we interpret the world and the relationship between the knower and the inquirer?	As the primary data was collected via interview, it created an interpersonal relationship between the researcher and participants. In particular, the information from the participants was collected by semi structured interview through open ended questionnaire. As such each interview was recorded, transcribed and reviewed by the interviewee to reduce potential bias and to increase accuracy.
Methodology	
How was knowledge is gained?	For this qualitative study, a case study approach facilitated the data collection and data analysis. A case study approach was undertaken within Case A to describe and understand internal factors shaping the use of OBPM in Case A from participants' perception. Multiple interviews were conducted within the case organisation. Research questions originated from the literature and prior findings. A critical examination of case organisation's data included triangulation of the interviewees' perception and other sources of evidence, to improve the representation of reality.

3.3 Justification of the methodology

The research methodology adopted for this research was case study. Case study research methodology is widely used in business disciplines including organisational research (Strach & Everett, 2008). Case studies are a valuable way of looking at the world around us (Rowley, 2002). Case study research gained acceptance as an appropriate methodology for the study of factors that impacted on PMSs within organisations (Elzinga *et al.*, 2009; Sole, 2009; Dormer & Gill, 2010; Sole and Schiuma, 2010; Sillanpaa, 2011).

Yin (1984, p. 23) defined the case study research method as:

“an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.”

Singh (2014) described case study as a study which allowed the question of why, when and how question to be answered about a contemporary set of events within some real-life context over which the investigator had little or no control. Similarly, Patton (2002) and Creswell (2007) asserted that case studies allowed investigation into contemporary phenomenon in its natural setting as opposed to historical events, entailing detailed and in-depth data collection and analysis through multiple sources of information.

Yin (1984) and Pedrosa *et al.*, (2012) focussed on the benefits of adopting case study approach and highlighted the ability of case studies to use contextually rich data to study a phenomenon in its real life context, that is, within the situation in which the activity takes place. Similarly, Yin (2003), Patton and Appelbaum (2003), Zaidah (2003), Cooper & Schindler (2006), Pedrosa *et al.*, (2012) and Adebajo *et. al.*, (2013) identified the key elements of the case studies including the use of multiple data gathering techniques, use of variety of evidence and data from different sources, obtaining multiple perspectives of the subject being investigated at a particular point in time.

This study undertook an in-depth study of one Central State Government Directorate. Single cases are a common design for undertaking case study investigations (Yin, 1994). The rationale for adopting this research approach for this study was that it is flexible, efficient and provides in-depth study of single organisation which could not be obtained from other approaches such as survey or even a multiple case approach. Table 5 presents rationale for using case study research for this study.

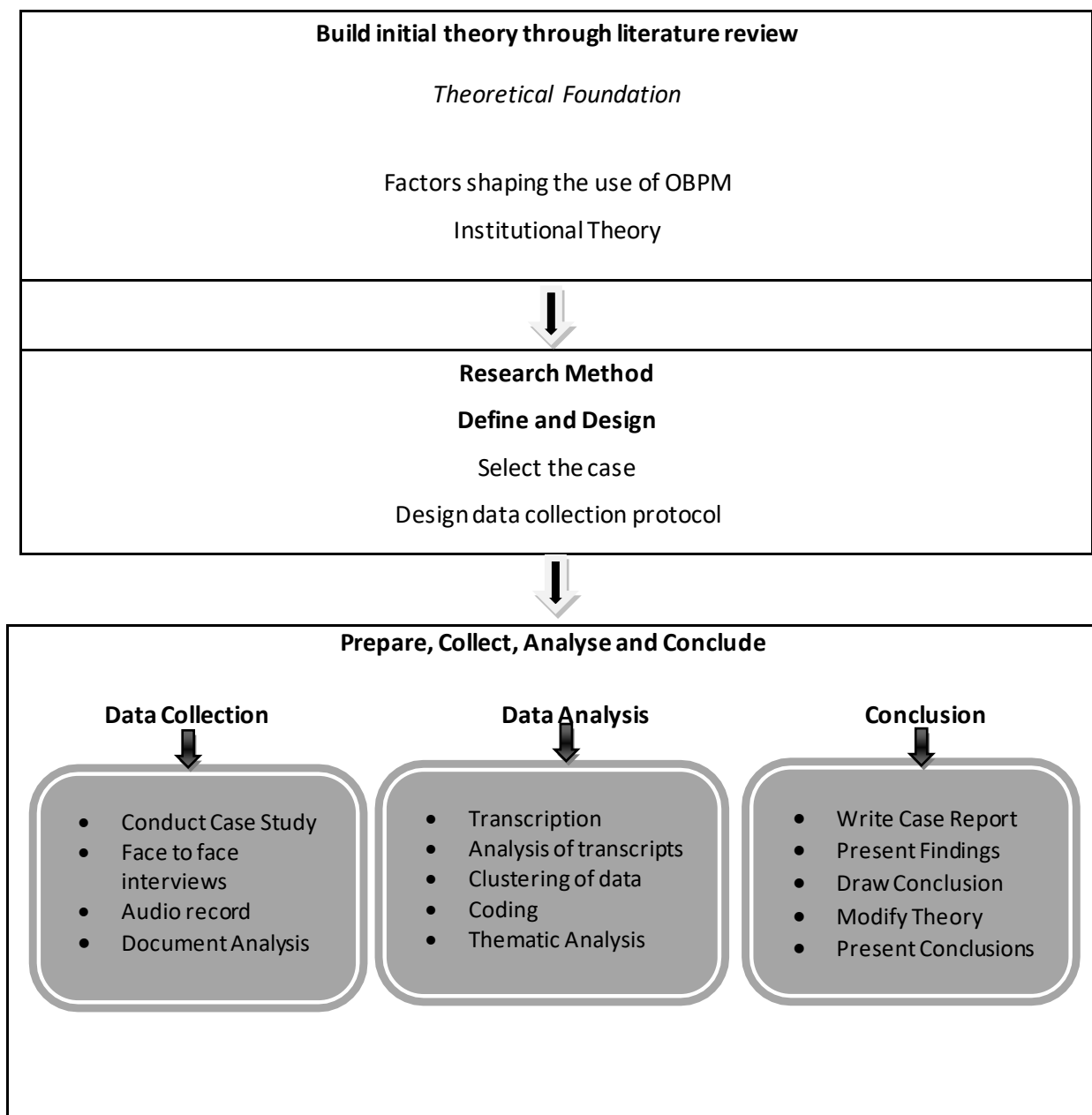
Table 5: Justification of case study research for this study

Condition	Rationale
The research was focused on contemporary events	This study identified the impact of internal factors on the use of OBPM in Case A. It is concerned with real life in the current organisational context.
The research had little or no control over the behavioural events	This research systematically interviewed senior executives, senior managers and other staff within a real life setting of Case A and thus no manipulation of behaviours was undertaken.
The research was based on theory building rather than theory testing	The study adopted inductive approach which was useful for theory generation, albeit, this research began with prior theory informed by literature review to guide the data collection process including the development of research questions in the interview protocol.
Type of generalisation was analytical rather than statistical	This study intended to generalise the empirical results of the case study to established theory (Rowley 2002) and not to enumerate frequencies or generalise the results to a population as in statistical generalisation (Yin 1984). In other words the study was designed to provide empirical evidence to explore how leadership/management commitment, organisational and employee engagement shaped the use of OBPM in a government department context.

(Adapted from Hastings, 2004)

Single case research designs have a long history in business and management fields, which demonstrates the enduring value of this approach. This was well illustrated in studies undertaken by Schonberger (1982); Karlsson and Ahlstrom (1995) and Narasimhan and Jayaram (1998). Dyer and Wilkins (1991) and Dubois and Gadde (2002) argued that one exceptional case is sufficient to constitute case research. Similarly, Strach & Everett (2008) noted that only one research case might be worth studying if it uncoverd new theoretical perspectives and/or interrogates old theories. Figure 5 illustrates the key aspects of the single case study research design used in this study.

Figure 5: Single Case Study Method



[Adapted from Bhat (2012)]

In this study, the researcher investigated the case organisation at a very detailed level using empirical data drawn from multiple sources:

- in-depth interviews;
- questionnaires; and
- documentation.

The principal source of data collection was in-depth interviews. In accordance with the interview guideline, the researcher clearly defined the required information through conducting the literature review, establishing a theoretical model and preparing interview questions. In this study, the interview guide used open-ended questions and probing which allowed the generation of rich and original empirical data (Travers, 2001). Probing allowed the researchers to drill down a particular topic by seeking clarification of participants' answers and requiring interviewees to elaborate on responses which disclosed an area of great interest (Qu and Dumay, 2011).

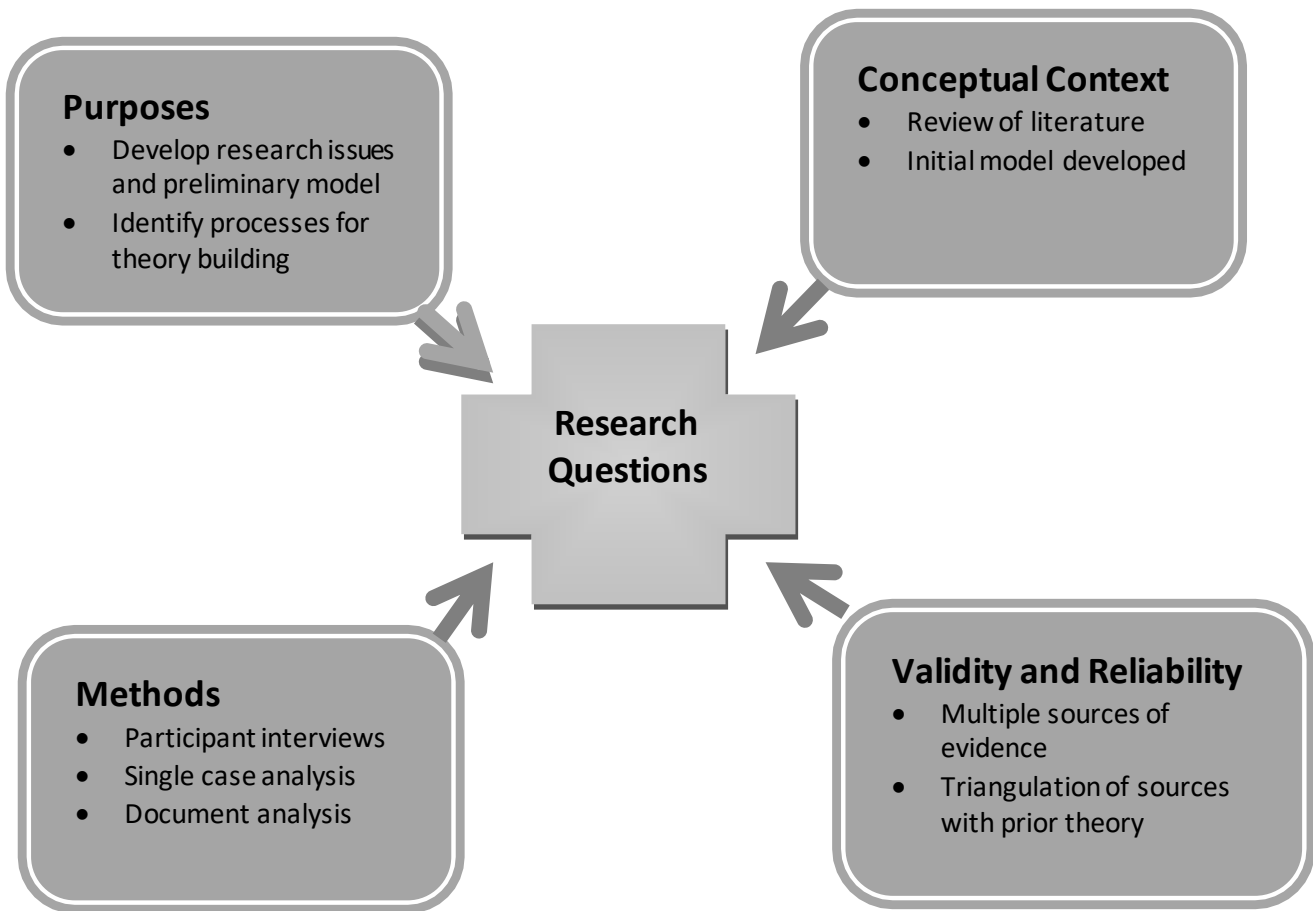
The use of semi-structured interviews in this study allowed the researcher to draw out the perceptions of the participants about the impact of internal factors on the use OBPM in the case organisation. The topics discussed during the interviews were derived from the extant literature on factors shaping the use of OBPM in public organisations. Precisely, the interviews sought to understand how the leadership/management commitment, organisational culture and employee engagement impact on the use of OBPM in Case A.

Participants for in-depth interviews are usually chosen based on their job role, qualifications, experience and who had the authority and knowledge to offer useful insights and comments on the research topic (Rowley, 2012). In this study, participants were selected based on their different roles and experience in order to obtain a suitable cross section of the organisation. The researcher selected different types of interviewees to achieve a better understanding of the phenomena. Sampling of interviewees is discussed in detail in section 3.6.

3.4 Criteria for judging the quality of a case study research design

Validity and reliability can be achieved in case study research within the realism paradigm through rigorous research design (Eisenhardt, 1989; Riege, 2003). This section outlines the study's research design and criteria. This section also describes the data verification, reliability and generalisation to demonstrate rigour of the case study research. Figure 6 illustrates the research design for this study.

Figure 6: Research Design for study



[Adapted from Maxwell (1996) in Crosthwaite (2010)]

There are four tests for establishing validity and reliability which can be used as a criteria for judging the quality of case study research - confirmability, credibility, transferability and dependability (Riege, 2003). A summary of techniques employed in this study, against each of these criteria, is shown in Table 6.

Table 6: Judging the quality and rigour of case study research

Qualitative Design Test	Definition	Techniques employed in this study
Confirmability	<ul style="list-style-type: none"> • Refers to the degree to which the results of an inquiry could be confirmed (Anney, 2014). • Assesses if data collection and interpretation of findings are clearly derived from the data and have been carried out in a logical and objective manner (Tobin and Begley, 2004). 	<ol style="list-style-type: none"> 1. Literature review 2. Initial theoretical framework developed 3. Triangulation <ol style="list-style-type: none"> a. Multiple sources of evidence: <ol style="list-style-type: none"> i. Multiple sources of interviews ii. document analysis b. Multiple viewpoints and set of experiences: <ol style="list-style-type: none"> i. Senior Executives ii. Senior Directors iii. Senior Managers iv. Employees 4. Establishment of chain of evidence 5.
Credibility	<ul style="list-style-type: none"> • Demonstrates that the inquiry was carried out in a credible way resulting in confidence placed in truth of research findings (Macnee and McCabe, 2008) • Involves approval of research findings by interviewees: <ul style="list-style-type: none"> ○ as realities may be interpreted in multiple ways ○ to ensure that empirical material have been correctly understood and interpreted 	<ol style="list-style-type: none"> 1. Use of multiple level of interviewees (senior executives, senior directors, senior managers and employees) 2. Use of multiple sets of experiences (replication)
Transferability	<ul style="list-style-type: none"> • Refers to the degree to which the results of qualitative research can be transferred to other context with other respondents (Bitsch, 2005). 	<ol style="list-style-type: none"> 1. Use of multiple sets of experiences (replication) 2. Use of case study research protocol 3. Define scope and boundaries of analytic generalisation 4. Compare evidence with extant literature to clearly outline contributions and generalise those within the scope and boundaries of the research.
Dependability	<ul style="list-style-type: none"> • Refers to the stability of findings over time and is achieved by through documentation of research procedures and appropriate record keeping (Cohen <i>et al.</i>, 2011). 	<ol style="list-style-type: none"> 1. Use of interview protocol 2. Record data using a tape recorder 3. Development of case study database 4. Establishment of chain of evidence 5. Congruence between research questions and research design 6. Research design reviewed by supervisor

[Adapted from Riege (2003)]

3.4.1 Data Verification

Data verification, particularly, triangulation helps facilitate the validation of data in qualitative studies through cross verification from two or more sources. Case study research enables the

collection of evidence from multiple sources and triangulation occurs with data, investigators, methodologies and theories (Rowley, 2002). In this study, data triangulation occurred through employing multiple sources for data collection.

Primary data was collected from first hand sources such as interviews with research participants. The empirical evidence collected through primary source was compared with data from extant literature. Secondary data collection was conducted by collecting information from a diverse source of documents including textual analysis of reports and official documents. Internal documents encompassed policies and framework related to performance management, budget papers, strategic plan and corporate plan. External documents included annual reports, financial reports, report on government services.

In this study, data triangulation was attained by using diverse data sources such as spreading interviews over a period of numerous months and selecting interviewees from different levels within Case A and interviewing multiple respondents such as Deputy Director Generals, Executive Directors, Directors, and Senior Managers. Hence the variety of triangulation methods used in this study helped validate study findings and enrich the conclusion reached (Jonsen and Jehn, 2009).

3.4.2 Reliability and generalisation

Case study research has been criticised for being limited in regards to generalisation. Rowley (2003) presented arguments to refute this criticism by expressing the difference between analytic generalisation and statistical generalisation. Case studies relied on analytical generalisation whereby empirical results of case studies are to a broader theory (Riege, 2003) rather than to a population as in statistical generalisation.

In analytic generalisation, empirical results of the case study were compared with previously developed theory (Rowley, 2003). If two or more cases are shown to support the same theory, then replication can be claimed and the greater the number of case studies that show replication the greater the rigour with which a theory has been established (Yin, 2003). This study thus addressed generalisation by the use of analytical generalisation to confirm or disconfirm the theory.

In summary, this study addressed the validity and reliability issues by using multiple source of evidence and ensuring validity through triangulation of data. Reliability was demonstrated by the use of analytic generalisation.

3.5 Role of prior theory

Prior theory established a conceptual framework that assisted in the generalisation of the results of the case study research (Eisenhardt, 1989). In addition, prior theory provided focus to the data collection phase (Perry 1998) and was used to inform interview protocol. In this study, prior theory was used to guide the development of the research questions. Prior theory had a pivotal role in: developing the theory process; the design of the case study; and in data collection and analysis (Perry, 1998). Thus, prior theory was considered as providing additional evidence for triangulation.

3.6 Case Selection

In this section, the approach to case selection is described, firstly by defining the case, considering sampling and describing the case and the number of interviews.

3.6.1 Defining the case

Yin (1994) suggested that the major step in designing and conducting a single case was defining the unit of analysis. The unit of analysis is where the researcher obtained data for the case study (Singh, 2014). The unit of analysis was the basis for this case study research as it defined the case and reflected the research objectives, main research questions and subsequent sub-research questions (Rowley 2002). For this study, the unit of analysis was organisational, that is, a government agency in Central State, Australia.

In this study, a holistic case study design was adopted (Yin, 1994), which examined the global nature of Case A as no logical subunits were identified. Case A provided public hospital services in Central State. The public hospitals are part of the Central State Local Hospital Network (LHN) which was administered by the Director General of Case A and supported by the staff of Case A. The performance of Case A and Central State LHN was monitored and reported via OBPM as a whole which made up Case A. As such there are no subunits identified since the performance reporting of Case A and Central State LHN was combined.

3.6.2 Sampling

In qualitative case study research, there are no rules for sample size or precise guidelines for the number of cases to be included (Perry, 1998). Cases studies involve single or multiple cases (Singh, 2014), however case selection are done in a way that maximise the efficiency of the study taking into account time resources (Rowley, 2002; and Yin, 2003). Perry (1998) suggested selecting information rich cases. This was supported by Etikan *et al.*, (2016) who additionally suggested selecting cases with maximum variation, and therefore in this study purposive sampling was used. The use of purposive sampling in this study enabled the researcher to identify and select research participants

who were proficient and well-informed with the phenomenon under study and were better able to assist with the research.

Several criteria were used to select the case organisation for this study. Firstly, case selection was determined by the research objective, research question, theoretical context and conceptual framework. Based on the existing literature and theoretical model, the researcher examined specific concepts in a public sector organisation. The second criteria was accessibility, that is, the case organisation's willingness to participate in the research project and where the researcher had good access to the empirical data needed for the study. Thirdly, the researcher undertook an in-depth study of a single case organisation. This study was based on a longitudinal, in-depth study of a single Central State Government agency. Longitudinal case research was considered valuable because the longer the period over which phenomena were examined, the greater the opportunity to observe the sequential relationships of events. In this study, the researcher was able to observe critical events and undertake the research over a three-year period.

3.6.3 Case descriptions

The study was conducted at Case A which is the largest Central State Government employer. The scale and the scope of Case A had expanded substantially over the preceding years. Total budget for Case A was estimated to be \$1.6 billion and with around 7,195 staff in 2017-18. Case A's vision is 'Your Health-Our Priority'. Case A has two Ministers – Minister for Health and Wellbeing and Minister for Mental Health. Case A Director-General guided the organisation in delivering its vision. Case A comprised four major divisions, each led by a Deputy Director-General (DDG) reporting to the Director-General. The current Organisational Chart for Case A is provided in Appendix B.

1. Pioneer Hospital and Health Services

The Deputy Director General Pioneer Hospital and Health Services (PHHS) managed the majority of staff working with Case A. PHHS provided acute, sub-acute, primary and community-based health services to the Central State and surrounding region through its key service divisions including: Surgery, Oral Health and Imaging; Women, Youth and Children; Critical Care; Cancer, Ambulatory and Community Health Support; Rehabilitation, Aged and Community Care; Mental Health, Justice Health and Alcohol and Drug Service; Pathology; Medicine; and Clinical Support.

Community health centres

The community health centres provide expanded health services to assist people to manage acute and chronic conditions in the community.

Walk-in centres

Nurse-led walk-in centres (WiC) provide free, extended hours primary healthcare services to the public.

2. Corporate

The Deputy Director General Corporate provided a range of corporate and strategic that supported the clinical service areas such as: Strategic Finance; Business Performance Information and Decision Support; Digital Solutions and Business Support Services. The DDG Corporate also oversaw the Health Infrastructure Program, which was the largest capital works project undertaken to modernise all aspects of Case A. The first of the four-year \$750m health infrastructure investment program were the opening of University of Pioneer Hospital and the North Side WiC in 2018.

3. Innovation

The Innovation Division oversaw Policy and Stakeholder Relations, Government Services, Strategy and Design including planning for Case A's future workforce and health service needs, Non-Government Organisations Funding and Health Planning.

4. Quality, Governance and Risk

The Quality, Governance and Risk Division provided quality and safety oversight, including contract management, audit risk and compliance, sustainability plan, business continuity, governance and strategy.

5. Population Health Protection and Prevention

Case A's Population Health Division provided a range of public and environmental health services, health protection and health promotion services, under the guidance of the Central State Chief Health Officer/Deputy Director-General.

Case A had responsibility for delivering a range of health care services to the Central State and surrounding region such as: public hospital services; community health services; mental health services; specialist palliative care; public dental services; and public health. These included illness prevention, health promotion, the detection and treatment of illness and injury, and the rehabilitation and palliative care of individuals who experience illness and injury. These health services were delivered by a variety of government and non-government providers in a range of service settings. Patient outcomes was the central focus of Case A and this patient-centric care was

delivered within a workplace culture that showcased its values of care, excellence, integrity and collaboration.

Case A Annual Report (2016-2017) showed that services delivered by Case A affected the community in the Central State in significant ways. For example, document reported that 78,277, 24,403 and 11,319 clients accessed inpatient, outpatients and emergency department acute care services respectively in Central State in 2016-17. 4,992 clients accessed acute admitted mental health services and 6,820 clients accessed sub-acute mental health services in the Central State. Case A also made 193,304 adult mental health program community service contacts, 65,846 children and youth mental health program community service contacts and 28,519 Central State wide mental health program community service contacts in 2016-17. 158,583 clients accessed justice health services community contacts in the Central State in the same year. 61,410 alcohol and drug services community contacts were made in 2016-17. 17,176 clients accessed breast cancer screen services from Case A in 2016-17. In addition, Case A provided 92,749 occasions of nursing services to community patients in a range of service settings and provided about 28,920 occasions of allied health regional services to community patients by Community Care Allied Health Professionals and Allied Health Assistants.

This study was conducted at a time of major organisational change when Case A was being re-oriented and services were re-aligned to meet the increasing demand of a growing population in the Central State. The organisation was to undergo significant changes in the next six to twelve months when Case A would split into two organisations. These changes were to bring the Central State into line with other Australian jurisdictions. One organisation would be responsible for clinical operations and focus on the operational delivery of quality health services to Central State's growing community. The second organisation would be responsible for strategic policy and planning stewardship of the Central State's health system. It would oversee the health system as a whole and set strategic direction for health services as well as provide health protection services and health promotion.

The Central State Government's Ten-Year Health Plan and the Territory-wide Health Services Framework 2017-2027 guided and set the direction for the planning and redesign of the health system to deliver better health outcomes for patients and ensure the future sustainability of infrastructure and services. Case A was to take the important next step in its transformation and transition to a truly person-centred, integrated health service. In the context of this change Case A leaders believed that the organisation's PMS effectively contributed to strategic and operational

outcomes. The current system was to transition to an outcome oriented performance management system with a focus on:

1. Seeking evidence on the outcomes being achieved for patients
2. Measuring impacts of delivering the planned outputs
3. Demonstrating the contribution made by the program to the outcomes

Case A provided an appropriate setting for this research because the current system utilised a PMS that aimed to focus on better health outcomes for its clients and would transition to outcome-oriented PMS. Case A aimed to reorient its performance management practices from a relatively narrow focus on efficiency to a heavier emphasis on outcomes and effectiveness. Such a shift in the use of performance management reflected the movement toward New Public Governance. Therefore this research contributed to the current debate around the efficacy of new public management tools in specific institutional settings.

3.6.4 Number of interviews

The researcher conducted a total of 20 interviews, with 11 of these being Senior Executives from the case organisation, two being Senior Managers and seven employees of the organisation. The interview matrix is shown in the Table 7. The interview process began with three pilot interviews. Convenience sampling was used for the pilot interviews. All three interviewees were well-informed with the phenomenon under study and had in-depth knowledge and experience of performance issues in the public sector in the Central State. These interviews were useful in:

- confirming that the research focus was of relevance and importance to the case organisation under study; and
- guiding the design of the semi-structured interview protocol for further interviews.

The interview matrix is outlined below in the Table 7.

Table 7: Interview Matrix

Position	Number of Interviews
	Case A
Senior Executive	6
Executive	3
Director	2
Senior Manager	2
Administrative Services Officers (ASO 6)	7
Totals	20

3.6.5 Sampling of interviewees

Patton (1990) opposed any quantitative measures for interview sampling whilst emphasising the richness of information provided by participants. Rowley (2012) stated that the key criteria that needed to be considered in deciding the number of interviews to be conducted was that the interviews must generate sufficient interesting findings. In this case study research, the researcher used purposive sampling to select the interviewees, where the researcher had the research objective in mind and participants that suited the objective of the study were selected. This involved the identification and selection of individuals that were proficient and well-informed with the phenomenon of interest.

In this study it was important to speak to the performance reporting team in the case organisation. Once the researcher enlisted her first interviewees, a snowballing process was used to identify potential participants. In addition to knowledge and experience, factors such as the importance of availability and willingness to participate were also considered. The next consideration was access to potential interviewees where participants were requested to sign a consent form that indicated their willingness to participate. The researcher reiterated the purpose of the research before conducting the interviews. Participants were informed about the relevance of the study and how the empirical data was to be used.

The researcher also ensured that the initial email or telephone call addressed the following issues as shown in **Appendix C**.

- Described the relevance of the research and information about the researcher.
- Provided consent attained from Case A Human Research Ethics Committee (Low Risk Sub Committee) as in many cases the consent from Ethics Committee was an important prerequisite for the participant's input.
- Provided a brief explanation of the research and sent the interview schedule to capture the interest of the potential interviewees.
- Advised about the amount of time the interview will take.
- Requested participant's permission to record the interview.
- Assured them of confidentiality.
- Provided details regarding benefits of the research to the organisation.

Respondents were interviewed on a one to one basis and they represented variety of divisions within the case organisation with different backgrounds, levels and experiences. Out of 30 people invited to participate 20 agreed to be interviewed. With the exception of seven interviewees, all

were part of the senior executive team in the case organisation. Since most of the interviewees were senior executive or senior managers, the response rate (67%) was excellent and an indicator that the research was of importance to the participants.

3.7 Data collection procedures

This section details the procedures for collecting multiple sources of empirical data for this research. Next, the case study and interview protocols are described and development of interview questions and the format are also explained. The case study database and the chain of evidence are outlined. The secondary source of data collection procedure is also described.

3.7.1 Case Study Protocol

Data collection in this research was guided by a case study protocol. The case study protocol used in this research enabled the researcher to outline in advance the procedures to be followed during data collection and improved the reliability of the research findings by providing structure for the research process (Perry 1998).

The essential components of the case study protocol for this study included:

- a) Brief overview of the case study project
- b) Field procedures followed
- c) Case study interview questions or interview protocol
- d) Guide for the case study research report

The complete case study research protocol is provided in **Appendix C**.

3.7.2 Interview protocol

The reliability and validity in this case study research was enhanced by a well-designed interview protocol. The interview protocol outlined the subjects to be covered during an interview, stated the questions to be asked and indicated the specific data required (Voss *et. al* 2002). The interview protocol used for data collection in this case study research was informed by the prior theory in the exploratory stage (Perry 1998). The interview protocol was used for the senior executives, senior directors/managers and employees and can be found in **Appendix D**. The interview began by outlining the ethics approval obtained from Case A Low Risk Ethics Committee and University of Southern Queensland Human Research Ethics Committee and obtaining the participants' consent to be interviewed. An outline of the interview protocol was sent to interviewees in advance to enable them to be properly prepared.

Interview questionnaire and format

There are many ways in which interviews could be conducted, particularly through using the level of structure to organise the research interviews. While Qu and Dumay (2011) focussed on structured questionnaires approach where all interviewees were asked the same questions in the same order allowing only limited number of response categories, Bryman (2001) discussed unstructured questionnaires, which encouraged the respondents to talk around a theme. The semi structured interview approach was most common and was used in this study.

Semi-structured interviews embody features from both structured and unstructured interviews (Cachia and Millward, 2011). This approach allowed intensive investigation and solicited expansive responses, and thereby unveiled hidden details and opened up new lines of enquiry (Burgess, 1982). As established by Qu and Dumay (2011), the semi-structured interview is a flexible, accessible and intelligible means of disclosing important and often hidden facets of human and organisational behaviour. In a similar vein, Kvale and Brinkmann (2009) claimed that it is the most effective and convenient means of gathering information.

The interview format in this study comprised of face to face interview which typically ranged from 30 minutes to two hours in duration. Open-ended questions were asked from a pre-established list which provided a direction to focus on the research issues. However, the researcher used probing and judgement to follow up any new information that appeared during the interviews that were outside the range of questions identified in the protocol.

As participants from different backgrounds, levels and experience were interviewed, two sets of interview questionnaires were developed, that is, a questionnaire for employees and a questionnaire for senior executives and senior managers. However, the introductory questions remained the same in both instances, for example, the introductory questions include:

- Can you briefly describe how the process of the OBPM system works in Case A?
- What do you think is the main purpose of the use of OBPM in Case A?
- What is your own assessment of the effectiveness of Case A's OBPM system, what works well and what can be improved?

The researcher then moved to the main interview questions, direct questions and probe questions to elicit the participants' views and understanding of factors shaping the use of OBPM in the organisation. For instance, the interview questionnaire for senior executives/directors and managers focused on factors such as organisational culture and commitment level of leadership/management

towards the use of OBPM in Case A. The interview questionnaire for lower level employees explored employee engagement such as: employee engagement in the planning process; choice of performance measures; and development of OBPM system and so forth.

Development of interview questions

The interview questions were derived from the research questions identified in Chapter 2 and were part of the exploratory stage of theory building. The interview questions were related to the three sub-research questions identified in Chapter 2. A summary of these research questions and related interview questions contained in the case study interview protocol is shown in Table 8.

Table 8: Relationship between research questions and related interview questions

Research Issues Developed in Chapter 2	Interview Questions in the Interview Protocol
RQ 1: To what extent does employee engagement and employee commitment influence the use of OBPM in the Case A?	Questions 5 to 11
RQ 2: How does organisational culture such as evaluative, learning culture and other cultural factors such as social networks and shared understanding impact the use of OBPM in the Case A?	Questions 7 to 11
RQ 3: To what extent does the commitment level of management and leadership of Case A shape the use of OBPM in the organisation?	Questions 12 to 17

(Source: Developed for this study from interview protocol)

3.7.3 Case study database and chain of evidence

Rowley (2002) asserted that a well organised collection of the evidence base or a case study database strengthen the replicability of the research and increase the transparency of findings. The electronic database established in this study contained case research notes made by the researcher, interview notes or transcripts, internal and external documents that were collected during fieldwork and analysis of the evidence.

The establishment of a chain of evidence was also considered. The link between the empirical data and the relevant section in the report needed to be maintained by appropriate citation of documents and interviews (Rowley, 2002). This enabled the reader to trace back any conclusions made to their related empirical evidence (Singh, 2014). During the data reduction process, the researcher ensured that the relationship between the raw data and the classification was maintained by placing the corresponding code on transcripts and thus maintaining the evidence trail.

3.7.4 Recording and transcription of interview data

Strach and Everett (2008) identified several ways of recording interviews such as a voice recorder and audio-visual recording. In this study, a voice recorder was used to record the interviews. The research participants in this study had prior understanding that the interviews will be recorded. Written consent was sought from interviewees prior to interviews being conducted.

After each interview, the researcher listened to the interview recordings to become familiar with the key points being made by the respondent and to understand his/her perspectives. Following this familiarisation process, the audio recordings were transcribed for further analysis. Transcripts were read repeatedly and compared to actual tapes to ensure accurate and true records were obtained. Completed transcripts were sent to all those interviewees that have agreed to review, revise and approve the transcripts for verification purposes. Accuracy of the data was increased by allowing participants to review draft transcripts.

3.7.5 Collection of documentary evidence

Yin (2003) suggested that data collection within case study research was strengthened by the study of relevant documentary evidence. Robson (2001) asserted that document analysis was relatively low cost method, whereby documents was checked and re-checked for data reliability. Document analysis also provided an independent and archival source of data for a research. In this research, such data was collected from external reports such as annual reports, report on government services, budget papers, and performance management frameworks. These documents were also used to verify the statements made by the research participants in the case organisation and therefore assisted in identifying the biases of participants.

One of the constraints in the data collection process was the lack of documents for the researcher to review. The researcher was not able to view or access internal documentary evidence that were considered sensitive such as Health RoundTable reports and Scorecard reports. The Health RoundTable was used as the national benchmarking tool to achieve best practice, to improve operational practices and performance in the organisation. The scorecard report delineated the operational indicators for internal reporting. Thus, access to some documentary evidence was limited in this study.

3.8 Data Analysis Procedures

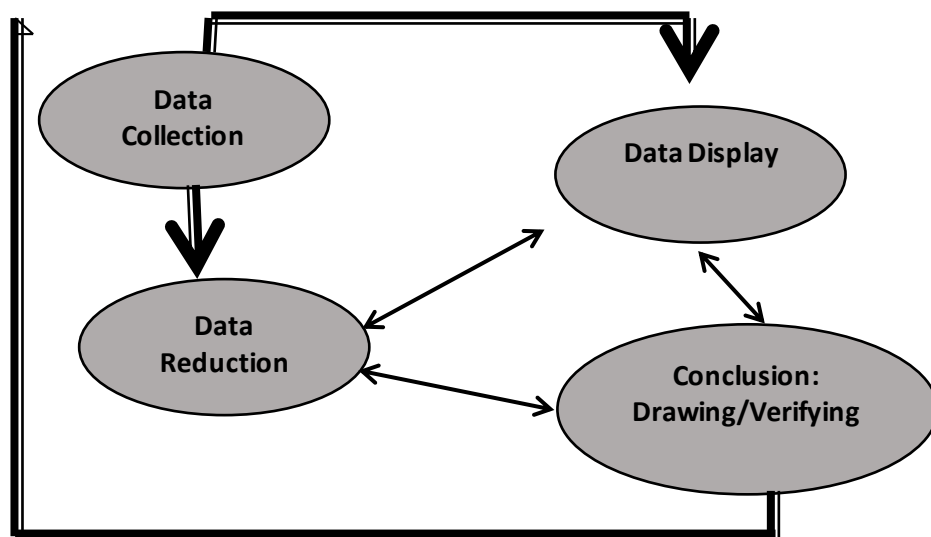
Rowley (2002) and Yin (2003) highlighted that the objective of qualitative data analysis was to draw meaning and derive value from contextually rich data to understand the phenomenon being studied,

interpreting prior literature and produce conclusions. In this research, the case study analysis adhered to the following principles:

- Use of all of the relevant (and available) evidence;
- The most significant aspect of the case study was addressed; and
- The researcher's prior expert knowledge in the area of the case study was drawn on, in an unbiased and objective manner (Rowley, 2002).

The approach adopted in this study was analogous to the three-stages data analysis process discussed in a study undertaken by Miles & Huberman (1994) namely: data collection and data reduction; data display and conclusions drawing and verification as illustrated in Figure 7.

Figure 7: Analysis and data display process



[Source: Miles & Huberman (1994)]

3.8.1 Data Management

In this section, the processes of data collection, reduction, display are described and drawing of conclusions is presented.

3.8.2 Data collection and data reduction

In this research, the data was drawn mainly from in-depth interviews, questionnaire and documents. Multiple sources of evidence facilitated triangulation of data sources and enhanced the validity of data analysis. The use of open-ended questions generated volumes of qualitative data and thus data reduction was used to reduce and organise data without distorting the meaning and relevance of the data gathered (Miles and Huberman, 1994). Data reduction was achieved through the process of

coding and writing summaries. Machine learning algorithm was used to organise the data and find clustering in the dataset (Donmez *et al.*, 2005; Crowston, 2011; Evers, 2018; and Chen, 2018). The clustering of data resulted in data reduction leading it to more manageable size. Through clustering, the researcher was able to understand the phenomenon better by grouping and then conceptualising objects that had similar patterns or characteristics. The Python sklearn module was used for machine learning. This contains open source machine learning libraries for unsupervised and supervised learning on textual data. The k-means algorithm was used, which uses unsupervised ML. For applying the k-means clustering, the text data is transposed to numeric features with the TF-IDF vectoriser, a feature available from Python sklearn. Then the data is categorised into natural clusters based on the defined number of clusters - k. The significance of the number of clusters is determined by repeating the experiment with k=2.8 and analysing the cluster centroid distance. The ideal number of clusters will have distinct categories that are closely clustered around a centroid.

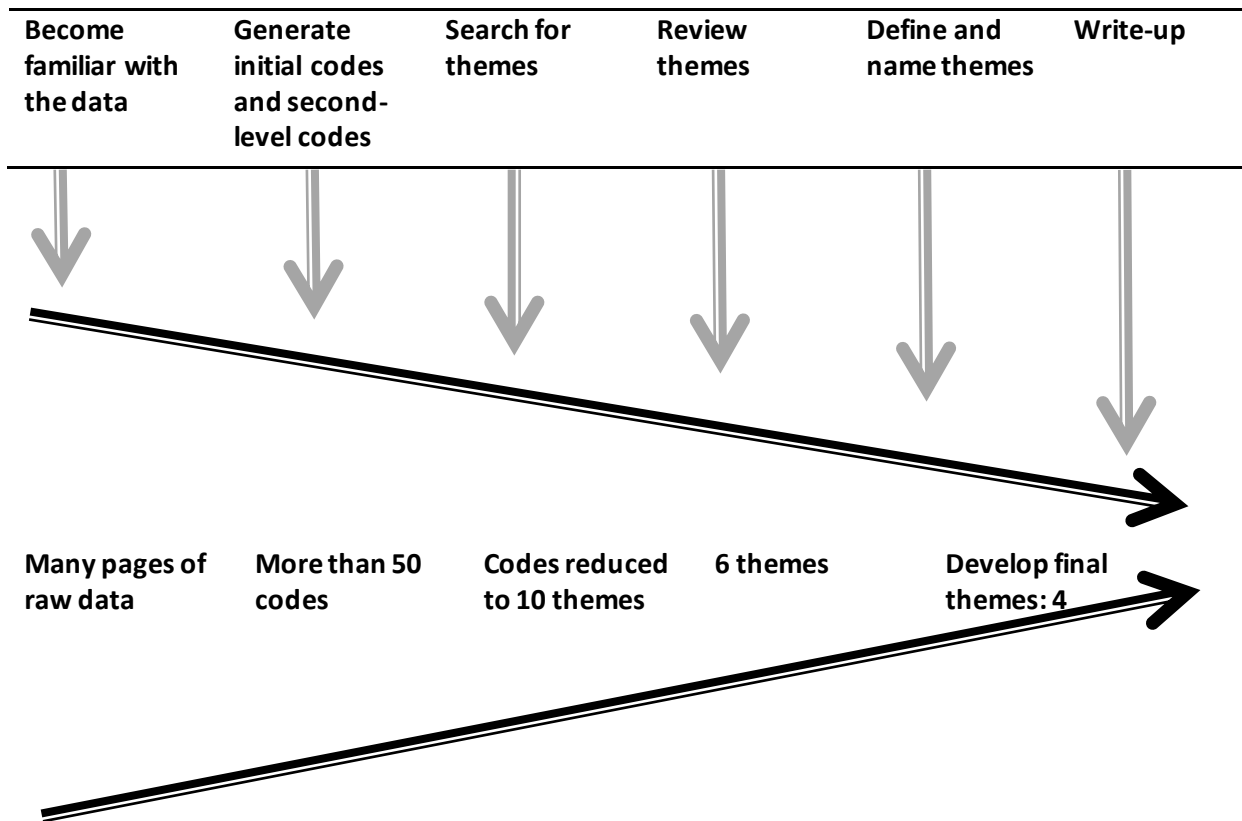
3.8.3 Data display

Data displays provided a means to condense large amounts of data into a more manageable form (Mile and Huberman, 1994). The authors described the data display as an organised, compressed assembly of information that permitted conclusion drawing and reference. For this study the data display took a number of forms including: texts itself; numbers; frequency count; graphs and charts. This allowed the researcher to examine the data, identify themes or patterns, analyse and draw conclusions.

3.8.4 Analysis and Conclusion

Rowley (2002) described data analysis as examining, categorising and tabulating evidence to address the research question and issues through the use of analytical reasoning to determine patterns and relationships. In this investigation, data analysis was carried out using thematic analysis. Maguire and Delahunt (2017) described thematic analysis as the process of identifying patterns or themes within qualitative data and use these themes to address the research questions and phenomenon under study. In this study, the researcher used Braun and Clarke's (2006) six-phase framework for thematic analysis as shown in Appendix E. That is, the researcher created and established meaningful patterns through the process of coding in six phases of thematic analysis as described below. An example of the thematic analysis adopted in this qualitative research is illustrated in Figure 8 below.

Figure 8: A graphic representation of Braun and Clarke’s six-phase framework for doing thematic analysis



[Figure 8: Developed for this study]

Phase 1: Becoming familiar with the data

Ritchie and Spencer (1994, p. 179) described familiarisation as a “process of immersion” where the researcher gets to know the data extensively and achieves a holistic sense of what is going on. In the initial phase of the thematic analysis, the researcher transcribed verbal data into written form by recording the transcripts for each interview in Microsoft Word initially. The researcher then organised the dataset by re-arranging chunks of text so that all the text relating to the answers to research questions were collated. The researcher then became thoroughly acquainted with the data by re-listening to audio, re-reading transcripts, checking the transcripts against the original audio recording for accuracy. After listening to the audio, the researcher worked through the transcript from the beginning, noting and discussing anything that seemed of potential interest and significance, as well as any thoughts and ideas pertinent to the research questions. The researcher started developing key themes and annotated the text accordingly.

Phase 2: Coding

Detailed reading of individual transcripts and field notes was followed by coding. Flick (2009) described coding as a process of early sense making of all the data; a component of data reduction; and disentangling a mass of data. Miles and Huberman (1994, p.56) described coding as:

“Tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study. Codes are usually attached to ‘chunks’ of varying size – words, phrases, sentences or whole paragraphs”.

The researcher used inductive analysis and used line-by-line coding to code every line. Open coding were used in this study where the researcher did not have pre-set codes, but developed and modified the codes as she worked through the coding process. Coding is often a very time-consuming task and as the scale of datasets grows tremendously it posed considerable challenges to manual coding. Some researchers use computer software to facilitate coding process. During this stage, the researcher used Machine Learning (ML) algorithms on the narrative data to find natural clustering in the dataset. The clustering of data resulted in data reduction leading it to more manageable size.

ML was extremely useful in facilitating the analysis of interview transcripts as it allowed the researcher to manage the data, annotate the text, search for keywords and organise the text. In particular, the K-mean clustering algorithm, which is unsupervised ML algorithm was used to reveal clusters within the data. The algorithm randomly assigned each observation into one of k categories, then calculated the mean of each data point to its cluster centroid. Next, it reassigned each observation to the category with the closest mean before recalculating the means. This step was repeated iteratively until no more reassignments were necessary. Using K-mean clustering, the researcher:

- Randomly assigned each data point to a cluster
- Computed cluster centroid
- Re-assigned each point to the closest cluster centroid
- Re-computed cluster centroids
- Repeated above two steps until no improvements were made

A range of number of clusters from k=2 to k=8 was used and to identify the optimum number of clusters for:

- the executives and senior managers

- the employees

Once the optimum number of clusters were identified, the derived clusters were reviewed to identify the open or first-level coding. At this point, all statements relating to the research question were identified, and each is assigned a code. The outcomes of the initial coding were to document number of distinct codes and clean the data where the researcher eliminated the codes which were not directly relevant to the research question to avoid redundancy. For instance, the researcher recoded similarly coded data into categories based on commonly shared characteristic.

Second-level or sequential coding involved second level of refinement codes and represented the final set of distinct codes common to all data generated. In this study, examples of final codes across all data included: OBPM is encouraged and supported by strong leadership; OBPM supported executive decision-making; poor communication; a weak learning and evaluative culture; OBPM was seen as a compliance exercise only; silo driven culture; and cultural disconnect.

Phase 3: Searching for Themes

Braun and Clarke (2006) identified that a theme is a pattern that captured something significant or interesting about the data and/or research question and is an outcome of coding (Rowley, 2012). In this study, the researcher examined the codes and some of them clearly fitted together into a theme. For example, there were several codes that related to the use of performance data to: decision-making; communicating program successes to stakeholders such as politicians and public; enhancing internal and external accountability; and advocating for resources to support program needs. These were collated into initial themes called the use of performance information and accountability. In this study, the themes are predominately descriptive, that is, they described patterns in the data relevant to the research question.

Phase 4: Review Themes

During this phase the researcher reviewed, modified and developed the preliminary themes that were identified in Step 3. At this point the researcher gathered all the data that is relevant to each theme using the 'cut and paste' function in Word document. The researcher read the data associated with each theme and considered whether the data really supported the themes. The researcher ensured that the themes were coherent and distinct from each other, that is, there were no overlaps.

For example, the researcher felt that the initial theme identified in step 3, accountability, did not really worked well as a theme and there was insufficient data to support it. The themes,

accountability and the use of performance information, did not seem to be distinct enough (on the basis of limited data) to be considered two separate themes. At this point accountability was eliminated as a stand-alone theme and collapsed into a new theme; usefulness of OBPM. This was reconsidered with respect to the entire dataset. The researcher was also interested in the prevalence of the theme, that is, how often they occurred.

Phase 5: Define Themes

At this stage, the researcher named all the themes that was to be presented in the results and analysis chapter. The final themes resulted from the process of a refinement of initial themes. Here the researcher identified the essence of each theme and determined what aspects of data each theme captured (as well as themes overall). Here the researcher referred back to collated data extract for each theme, organised them into a coherent and consistent account and created an overall narrative with all of the data. After continuous revisions of themes in relation to the data, the researcher produced a final thematic map to illustrate the relationship between themes.

Phase 6: Writing-up

The goal of this phase was to write-up the findings of the thematic analysis and convey a concise, coherent and interesting account of the story articulated by the data. The write-up provided sufficient evidence of the themes within the data with accompanying vivid data extracts which demonstrated the relevance of the themes.

3.9 Limitation of the research

This section examined two common limitations of case study research; absence of generalisable conclusions; and the issues of validity.

3.9.1 Criticism of the case study research approach

Case study research has been subject to a number of criticisms, the most common of which concerns the validity and generalisability (Tellis, 1997; Perry 1998; Rowley 2002; Yin 2003; Creswell 2014; Yin 2014; Idowu 2016). The techniques used to counteract the constraints pertinent to validity in this study are outlined in detail in section 3.4 and included things such as using multiple sources of evidence; establishing a chain of evidence and having a draft case study report reviewed by key participants.

In terms of generalisation, the researchers such as Normann (1984); Perry (1998); Rowley (2002); Dul and Hak (2008); Barratt *et al.*, (2010); Creswell (2014); Yin (2014); and Idowu (2016) refuted criticism of a case study research in the literature about its inability to provide a generalising

conclusion. The researchers argued that the criticism of a case study research, particularly, its inability to provide generalising conclusion is related to statistical generalisation of research findings. These authors asserted that statistical generalisation of research findings is predominant in scientific research which required the researcher to provide evidence for a large sample and representative for the population to which the findings were to be generalised. However, it was not of primary concern for case study based research.

These commentators also asserted that case study research enabled the researchers to investigate real-life situations, issues and problems, specifically, by investigating a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context were not clearly evident.

3.10 Ethical Consideration

A number of well-established ethical principles and practices had been used in this study to address the common ethical concerns encountered by the qualitative researchers. The ethical issues identified in a study undertaken by Orb *et al.*, (2000) were followed in this study, namely: protecting the participants from harm; informed consent; assurance regarding confidentiality and anonymity; recognition of participants' rights including the right to be informed about the study, the right to freely decide whether to participate in the study, and the right to withdraw at any time without penalty. In addition the ethical procedures of USQ (<http://www.usq.edu.au/research>) were followed.

Specifically, this study adopted the following ethical practices:

- a) the study was approved by the USQ Human Research Ethics Committee.
- b) the study was approved by Case A Human Research Ethics Committee – Low Risk Subcommittee (refer **Appendix C.2 & C.3**).
- c) the participation information sheet and the consent form in this research project provided adequate information to the research participants so that they could make informed decision to take part in the study.
- d) participants were assured of confidentiality through the consent form and confidentiality of the identity of information sources was maintained through a secure database.
- e) the research finding was reported in an unbiased manner.

3.11 Conclusion

In this chapter the research methodology and design used in this study had been outlined. In doing so the theoretical and philosophical assumptions underlying the research methodology was presented. The case study approach had been justified and described in detail. Case selection, data collection and analysis techniques had been described. It then presented the limitations and ethical approach used in this study.

Chapter 4 Findings, Results and Discussion

RQ 1: How does employee engagement influence the use of OBPM in Case A?

4.1 Introduction

The previous chapter discussed the research methodology used in this qualitative single case study. The objective of this chapter is to present the case data findings and results. The findings chapter start with reporting of data against the first research question: *How does the employee engagement influence the use of OBPM in Case A*. This chapter also presents a discussion of the results and compare these results to the literature discussed in Chapter 2.

4.2 Impact of employee engagement on the use of OBPM

Out of ten employees invited to participate from the Performance Information Branch (PIB) in the case organisation, seven agreed to be interviewed. These employees suited the purpose of the study and were proficient and well-informed with the phenomenon of interest. These employees also demonstrated availability and willingness to participate. The respondents were asked for their perception of the impact of employee engagement on the use of OBPM. The responses identified four major themes as displayed in Table 9.

Table 9: Responses related to the impact of employee engagement on the use of OBPM

Respondents → Themes ↓	A001	A002	A003	A004	A005	A006	A007
Employee engagement: a missing component in strategic planning, KPI development and OBPM Design	○	○	○	○	○	○	○
Employee understanding of KPIs and dispersed information systems	◐	●	●	●	●	●	●
Employee know-how and OBPM-related training	○	●	◐	◐	◐	●	◐
OBPM usefulness	●	●	●	●	●	●	●

(Developed for this study from responses to questions Q1-Q11 of the employee interview protocol)



Strong



Weak



No

4.2.1 Employee engagement: a missing component in strategic planning

The data suggested a lack of employee engagement in the strategic planning process. This finding is inconsistent with the past research findings of Wairimu and Theuri (2014) who stressed the importance of involving employees in early stage of strategy planning to maintain harmony in the organisation and to ensure that all members of organisation are moving towards particular common goals since employees' are directly involved in the implementation of the strategies. Table 10 shows responses in relation to employees' non-involvement in the strategic planning process. It became evident that staff members at low ranking positions had less exposure to the process, hence they could not provide more information about it.

Table 10: Employee engagement: a missing component in strategic planning

Theme	Supporting Comments
Lack of employee engagement in strategy formulation	<i>The busyness and churn of work and under resourcing has resulted in a very little time put aside for staff to get involved in the Central State's planning process. As a result, I need more clarity around my roles and responsibilities in the strategic planning process and understanding of the connection between the strategic planning and OBPM (A001).</i>
	<i>I did not participate in the strategic planning process. The senior executives contribute towards design of the strategic plan (A005).</i>
	<i>No involvement at the planning process which is done at a higher level. More clarity around my involvement in the strategic planning process and relationship between the OBPM and these strategic objectives would be beneficial (A006).</i>
	<i>I have little understanding about my role in the strategic planning process and link between planning process and the performance measurement. I do not have access to the strategic documents (A007).</i>

(Developed for this study from responses to questions Q5 of the employee interview protocol)

In particular, the finding of the current study indicated failure to engage employees' during the strategy formulation stage. This is inconsistent with the findings of Reid *et al.*, (2014) who emphasised the importance of engaging employees during the strategy formulation phase, particularly, in activities such as reflecting on past performance, establishing future directions, examining opportunities and threats emanating from external environment using planning tool such as SWOT analysis; conducting environmental scans or reviewing industry trends; performing internal assessment such as brainstorming techniques.

This study demonstrated that lack of employee engagement in strategy formulation resulted in: employees feeling disconnected; unclear about their roles and responsibilities in strategic planning process; and have limited understanding of the interplay between the planning process and the use of OBPM system. In some cases, employees did not have equal access to the strategic document and were not even aware that a strategic plan existed even though there was a claim from top

management that implementation was taking place. These findings support the past research findings of Wairimu and Theuri (2014) which revealed that staff at the low-ranking positions were not aware of the strategic planning process or had limited understanding of their roles and responsibilities in the planning process.

This was also confirmed by the results of Case A culture survey, which highlighted that the employees felt disconnected and were unclear about how they fitted into the organisation more broadly. This was an important finding that needed to be addressed by Case A leaders since they had an obligation to create awareness amongst employees to ensure that they were well informed of the process of strategic planning as it formed basis of achieving organisational goals and objectives. Nieboer (2011) stressed that ongoing communication is an important aspect of implementation, that is, the plan implementation begins with communication about the plan throughout the organisation. It needed to be made clear that the plan is consistent with the organisation's vision, mission, goals and objectives. Similarly, Whelan and Sisson (1993) stressed the importance of effective communication of strategic plan throughout the organisation.

Nevertheless, two respondents indicated that they were involved in the planning process at divisional and project level. For example, one respondent stated that she participated in the Divisional Planning Day once where they discussed team purpose, objectives, KPIs, resources, support and timeline required to achieve the high-level objectives: *“I was once involved in Branch Planning session where we discussed our team purpose, values, objectives, KPIs, resources and support required for us to reach our objectives and timeline, some KPIs are developed and monitored at the Branch level (A003).”*

Another respondent said that she participated in a planning process for a strategic project, called inpatient history, which included hospital operational performance measures for five years: *“I participated in a planning day for a strategic project – inpatient history - which includes 5 years of hospital operational measures) which is on PIP and shows performance information about a ward, speciality – admission, discharges, transfers, etc. Data is published and reported on intranet for it to be accessible to anyone who wants to use the data. For example, number of discharges in this financial year compared to the previous year, compare statistical discharges, compare utilisation of the wards e.g. if the ward has 28 beds and utilisation is just 20 then have to determine the reason for underutilisation of the ward (A004).”*

The evidence suggested that the strategic planning process is seen as a separate and distinct executive exercise in Case A who were fully involved in the process and contributed toward the formulation of the plan with little relevance to staff members at low ranking positions. This finding

validates the study undertaken by Dandira (2011), who noted that the top management monopolised the strategic planning process to express a sign of power and distanced themselves from their subordinates.

The findings indicated prevalence of top down leadership style where the vision, mission, strategic goals and objectives were being formulated by the top management and administratively cascaded down to the employees of Case A. That is, the strategic priorities were formulated by senior executives which was then administratively cascaded down all the way to the middle management and employees. These findings conform to the study undertaken by the Wessel (1993) who noted top management style as one of the major obstacles to strategy implementation as senior leaders spent a lot of time creating the strategic plan, often in isolation.

This study highlighted that the staff are expected to implement the strategic plan that they did not have access to or did not even know about. Several studies on strategy implementation (Ansoff and McDonnell 1990; Noble 1999; and Barney 2001) indicated that the problem of strategy implementation still persists because the employees did not have inputs at the formulation stage and they felt that that strategic plan belonged to the architects of the documents, that is, the top management and therefore they turned away from it. This result supports the past research findings of Henry (2008) who argued that the strategic plans developed by the senior management team might not be owned widely in the organisation. Thus the strategy implementation became a mammoth task because the employees were not involved in the formulation stage. These findings indicated that there is a need to encompass employees from the beginning of the strategic planning process so that they understood the plan, understood their contribution in implementing the plan and took ownership.

Dandira (2011) did not see any problem in involving only the top management in the strategic planning and he argued that not everyone could participate in the strategic planning process in large and complex organisations. He further argued that the employees needed to be well equipped and well informed of the vital information about the strategic plan as they were ones who are supposed to implement the strategies. This study showed poor vertical communication where managers were struggling to communicate the strategic plan to employees who did not participate in strategy formulation process resulting in employees not being well informed of the strategic plan. The employees were not well informed about what they were supposed to implement.

This specified the issue of a missing link between the formulation stage and implementation stage. The leaders of Case A regularly received feedback from their employees about the communication of strategic plans and strategic directions. The findings showed disconnect in this space which stressed

the need for improved communication from the executives to front line staff about the strategic direction. The results showed that poor vertical communications led to occurrence of strategic misalignment where operational initiatives are not aligned with the defined key outcomes and strategic priorities of the organisation. Due to poor communication about the strategic direction and strategic focus, employees showed poor understanding of the vision, goals and objectives of the organisation which in turn resulted in misalignment between operational efforts and strategic priorities.

4.2.2 Employee engagement: a missing component in KPI development

This study demonstrated that KPI's include quantitative and qualitative metrics (strategic, accountability and operational) that allowed Case A to monitor, measure and report on its overall performance. This is consistent with the findings of Karami (2017) who described KPIs as the quantitative and qualitative measures that were used to evaluate progress of the organisation towards the attainment of its planned goals and objectives.

This result demonstrated that KPIs enabled the senior executives to use the performance information to improve overall performance, increase accountability and transparency, and inform decision-making regarding budgeting and financial management. This is consistent with what had been found in the previous findings of Lauriks *et al.*, (2012) who posited similar reasoning for the use of KPI's.

Thus, it was pivotal to engage employees directly in the development of the performance indicators so that they can see what it meant to them personally and how they could contribute towards achievement of these targets (Likierman, 1993 and Tung *et al.*, 2011). This study indicated that the strategic objectives and accountability indicators were formulated by the senior executives and endorsed by the Minister for Health. Case data suggested that senior executives are the ones who contribute towards the development of KPIs and targets at strategic level. The respondents stated that strategic and accountability indicators were developed at higher level and that they did not have influence on the choice of performance measures.

It is evident that a lack of employee engagement in the strategic planning process resulted in a subsequent lack of employee participation in the KPI development process. This has the potential to raise difficulties for Case A for reasons noted by Kleingeld *et al.*, (2004) that where employee participation in KPI development was formally launched by management, there were clear-cut ideas on what employees had to do and how their work fitted into the big picture. Hence there was a positive impact on productivity and performance of an organisation as a whole.

Furthermore, Tung's *et al.*, (2011) and Likierman (1993) posited that a bottom-up participation approach to KPI development enabled employees to define their responsibilities and the associated KPIs and which resulted in full commitment from employees and achievement of the desired outcomes.

Nevertheless, the data showed that less than half of the respondents indicated that they had influence on the choice of performance measures which were reported internally to operations managers, directors and executives. Of the respondents who indicated that they had an influence on the choice of performance measures were mostly involved in development of KPIs at operational level. This finding aligns with the findings of Groen *et al.*, (2012) who emphasised the significance of involving employees in the development of KPIs to prevent the risk related to the imposition of metrics that poorly reflect the operational characteristics of their work.

4.2.3 Employee understanding of KPIs

The respondents were asked for their perception of their understanding of KPIs and the approach used by their managers to strengthen their understanding of these KPIs and to explain these measures to them. The study indicated a new finding that the employees' had a strong understanding of the multidimensional attributes of KPIs including:

- KPIs were measured within timeframes;
- KPIs held people accountable and that employees understand KPIs;
- KPIs align with strategic objectives;
- KPIs align with each other, that is, accountability, tactical and operational accountability align with each other; and
- KPIs were measured against benchmarks.

Overall, the majority of respondents demonstrated a good understanding of KPIs and the ability to interpret the meaning of KPIs. In particular, the employees' read the service level agreements and interpreted national level definitions and the calculation methodologies. The employees verified data definitions from METeOR (metadata online registry) which provided all the data definitions. For instance, one respondent said: *"I have sound understanding of the multidimensional elements of KPIs. Most of these measures are written down in the service level agreements and we read the service level agreements and we interpret the national level definition and how it is calculated. We verify data definitions from METeOR (metadata online registry) which provides all the data definitions (A002).*

The employees' showed strong understanding of the three fundamental types of KPIs: strategic/accountability; tactical and operational indicators. Generally, the respondents noted that the strategic and accountability indicators were designed by senior executives to enable them to implement strategy and manage organisational performance. Whilst, tactical indicators were designed to help divisional managers to optimise the performance of their people and processes, operational indicators enabled the front-line staff to monitor and control core services on a daily basis. Table 11 shows the respondents understanding of strategic, tactical and operational KPIs.

Table 11: Types of KPIs

	Strategic	Tactical	Operational
Focus	Strategy	Processes	Operations
Use	Management	Analysis	Monitoring
Users	Executives	Managers	Employees
Scope	Corporate	Divisional	Operational
Metrics	Outcome/Accountability	Outcome/operational	Operational
Performance Dashboard	Statement of Performance	Scorecard/PIP	Scorecard/PIP
Source	Scorecard/PIP		
	Budget Papers (BP), Service Level Agreements (SLA), Service Funding Agreements (SFA)	BP, SLA, SFAs, Data warehouse and Databases	CSPAS and other databases

(Developed for this study from responses to questions Q7 of the employee interview protocol)

The respondents felt that OBPM played a vital role in monitoring organisation's progress, which comprised measuring the actual results against organisational intended strategic outcomes and objectives. The case data suggested that the KPIs were a fundamental component of OBPM as it embodied organisation's strategic objectives and measures organisational performance aligned with the strategies. OBPM aligned a shared set of KPIs across the organisation.

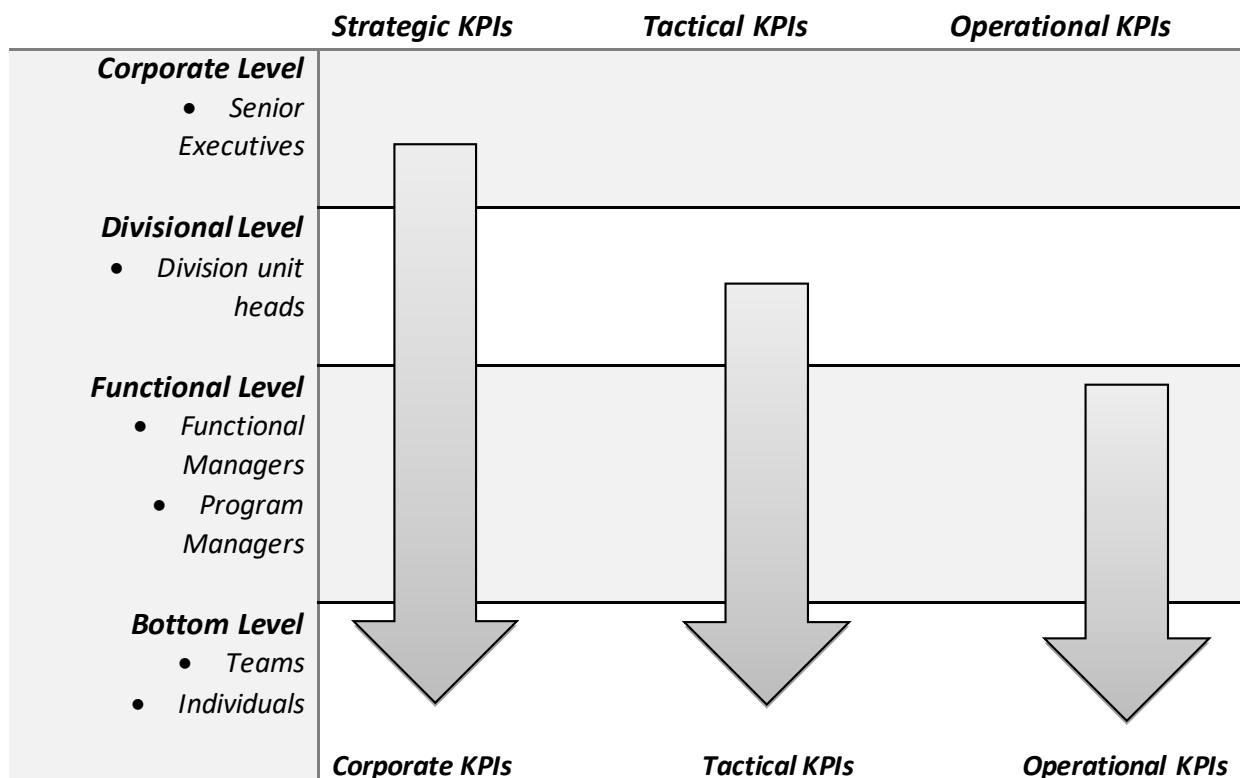
This study showed that KPIs were explained to the employees through the concept of cascading, that is, the strategic and outcome KPIs rolled down from executive level to various levels across the organisation. Case A is a large and complex organisation and is fragmented into multiple divisions, business units and levels of management. These multiple business areas and divisions had more performance databases at lower levels of the organisation. The multiplicity of interconnecting performance databases was best understood through the concept of cascading, that is, the strategic and outcome KPIs rolled down from executive level to various levels across the organisation. This finding aligns with the findings from Muras's *et al.* (2008) study that focused on communicating and cascading KPIs downwards through the organisational hierarchy. In their study, they illustrated that top down approach or cascading process started with executives, who defined KPIs in relation to the organisation's strategic objectives and priorities. These KPIs are then cascaded down to the next

level of management who set their KPIs for their divisions against broad KPIs. KPIs continued being cascaded down to employee level.

It is evident that Case A has adopted top-down approach, where the senior leadership team formulated strategic, tactical and operational performance metrics for the organisation and were accountable for the measurement and reporting of these metrics. For example, one respondent stated that: *“I do not have any involvement in development of KPIs (strategic and accountability indicators) which is developed by the leaders of the organisation. Predominantly, my work focused on reporting of the KPI’s which guide the clinical unit to track their performance”* (A005).

The senior executives used KPIs to define strategic objectives tailored to every individual and role in the organisation, facilitated strategic review and managed performance. As depicted in Figure 9, these KPIs were cascaded to the divisional heads and their employees. The respondents expressed that the performance measures were communicated by executives, divisional heads, functional managers and team leaders which strengthened their understanding of these measures.

Figure 9: Cascading of KPIs to the employees



(Developed for this study from responses to questions Q7 of the employee interview protocol)

Notably, one respondent reported that there was a lack of understanding of how the KPIs could be developed to monitor organisational performance, that is, measuring the actual results against the

outputs set in the SFAs of the NGOs. The respondent said that: *“the SFAs are not well-written, there are lot of repetitions, there are things that are not very clear and I am not quite sure how the performance measures were developed”* (A001).” The respondent also stated that her manager did not get an opportunity to explain these performance measures to her due to time constraints: *“the critical thing for me is to use my common sense and good understanding to get these assessments started.”*

4.2.4 Dispersed Information systems

This study revealed the use of dispersed IT systems for the collection, storage and reporting of performance information. Case A used a dispersed IT infrastructure and Case A’s Data Warehouse linked these multiple information management systems across the organisation. There were over 250 different systems in place across Case A that held performance data and this created complexities around collection, storage and reporting of consistent information on the 1.5 million episodes of care that Case A provided each year. The respondents noted that the dispersed information system produced a number of issues including: lack of data integrity between the reports; multiple sources often led to inconsistency; and there was absence of connectivity.

For instance, one respondent said:

“during extraction, transformation and Load (ETL) process when performance data is extracted from multiple source systems such as ACTPS database, Emergency database, Pathology database, Breast Screen database etc. and loaded into the data warehouse, data quality challenge here is that with multiple data source systems, transactions cannot be properly attributed to a single source” (A002).

Consequently, considerable overlap existed between the systems and when data was extracted from multiple sources it often led to inconsistency and limited the information system’s capability to provide reliable, valid and timely data at an effective cost. Due to the problems in the information system related to the multiple sources, Case A was unable to submit 2015-16 data to the Australian Institute of Health and Welfare for the ROGS and thereby failed to meet the reporting requirements at national level. Prior studies support these findings indicating that information system problems represent a major impediment to the successful implementation of PMSs (Cavalluzzo and Ittner 2004; Uppatumwichian 2013; Primarisanti and Akbar 2015; Ping et al., 2018).

The data integrity and quality issue in the data warehouse was another area of concern identified by the respondents. This was mainly due to unavailability of data dictionaries resulting in low visibility of data definitions to front line Case A data entry staff. Case A experienced data quality issue due to inconsistent use of data definitions used in across the organisation or with national standards. These

inconsistencies were mainly related to definitions of performance metrics, sources of data for obtaining measures, and ways of presenting reports. Managers who tried to get a total picture of the overall performance from these reports found themselves confronted with a large volume of (inconsistent) information in a format that did not support integrated analysis. This finding supports the prior findings of Fryer *et al.*, (2009) and Lewis (2015) that focussed on problems with performance management systems.

The findings also revealed technological issues related to the compatibility of the new system with existing systems. It seemed that some of the divisions were reluctant to invest necessary resources in the new system and were still using less sophisticated IT infrastructure leading to compatibility and integration issues. These technical problems resulted in inability of existing information systems to provide required data in a reliable, timely, and cost-effective manner. Nonetheless, one respondent said that the data validation tool was used to maintain high quality of performance data in the OBPM system. This finding validates the study undertaken by Cavalluzzo and Ittner's (2004) who noted that the technical issues such as compatibility of the new system with the existing systems, system complexity and the system's relative improvement over existing systems create major impediments to the successful implementation and use of PMSs. They highlighted that most of these technological issues were related to the inability of existing information system to provide required data in a reliable and cost-effective manner.

On the other hand, the respondents also noted that the PIB branch used well sophisticated IT systems such as SQL, SSRS, Excel, R, data validation tool and data warehouse that provided for the automatic dissemination and reporting of KPIs. The technological advancement helped to generate reports that outlined the actual results against the KPIs. The performance data collected from multiple IT systems such as CSPAS, CAS, Pathology and Breast Screen through data dumps and extracts was stored in the data warehouse (a product of Microsoft Sequel Server). Krumwiede (1998) suggested that organisations with higher quality and more sophisticated information systems were able to implement new measurement system more easily because measurements costs were lower, which resulted in positive relations between current information system capabilities and implementation success. For instance, the current study indicated that the technical staff used the software on the tables created by the data warehouse team to clean, transform and model the data in more useable and readable format. PIB had created its own IT systems splitting each of the services and creating separate tables in the databases such as information about the cancer patients and admitted patient care. Similarly, Munir *et al.*, (2013) highlighted that advancements in information technologies allowed organisations to deploy innovative PMS systems which became useful and effective in meeting the challenges of their changing business environment.

4.2.5 Employee engagement: a missing component in the design of OBPM IT system

The current study indicated a lack of employee engagement in the design of OBPM IT system. Tung *et al.*, (2011) examined the effect of lower level employees' participation in the design of PMS on the effectiveness of PMSs as did Sole (2009). Sole's (2009) study found that the involvement and motivation of employees during the design of PMSs could have a great impact on its success. He highlighted that employee engagement could encourage employees' accountability, learning, motivation and contribution to solutions.

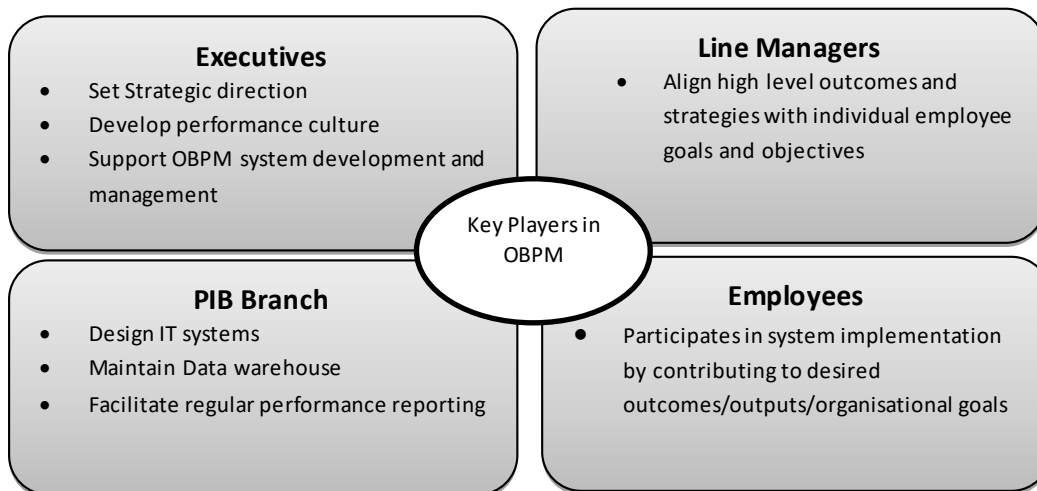
Despite low employee engagement in the design of OBPM, the respondents indicated that the organisation actually delivered the programs and services to achieve its goals, objectives and desired outcomes identified in the planning phase. Macey *et al.*, (2012) highlighted that the engagement during this stage of OBPM design encompassed employees' active engagement in delivery of services and programs to achieve the goals, objectives and desired outcomes identified in the first phase of the design.

Two respondents expressed that they were more involved in the design of performance reports and ensured that these reports were submitted to the end users in a timely manner. This was mainly done by tracking the KPIs. That is, performance against these indicators were reported by the Case A on a monthly, quarterly, bi-annually and annually. This finding is consistent with previous research findings of Macey *et al.*, (2012) who noted that this phase involved employees' engagement in the design of performance reports and submission to the end users in a timely manner.

4.2.6 Employee know-how

Respondents were asked for their perception of the availability of required human expertise to facilitate the use of OBPM. Overall, the respondents felt that the organisation had skilled human capital within the organisation and PIB branch to facilitate the use of OBPM system. The respondents identified that the design and use of OBPM system was a collaborative effort amongst different key players. Figure 10 shows key players who facilitated the use of OBPM in Case A.

Figure 10: Skilled human expertise facilitating the design and use of OBPM



(Developed for this study from responses to questions Q10 of the employee interview protocol)

One respondent expressed that the organisation had experienced strategists who had strategic focus and understood government’s desired outcomes and organisation’s overall strategy and goals and had the ability to integrate that into the OBPM process to deliver high quality health care services. The respondent felt that the executive team developed a performance culture by communicating the organisation’s vision and values top-down through reporting lines to its managers and employees across the organisation.

“the organisation has a strategic team who have high-level understanding and long-term view of the objectives of the government, as well as the requisite expertise to help others set targets, that is, to divide the government’s high-level goals into specific objectives and KPIs at the entity level. They possess strong communication skills and are able to connect with employees and obtain their commitment to the OBPM” (A005).

Through the cascade process, the management team helped employees understand how their everyday work and individual goals aligned with the strategic direction that helped achieve the high-level desired outcomes and strategic objectives and goals. Employees who had a clear line of sight to the higher-level goals of the organisation gained better appreciation of their contribution. Table 12 shows the response related to cascading process.

Table 12: Responses related to cascading process:

Theme	Supporting Comments
Cascading of KPIs to employees	<i>Performance measures are explained by the managers thoroughly (A002).</i>
	<i>Managers who have sound understanding of performance measures and health background provide support and explain the measures. Regular meetings are conducted to discuss if the measures are implemented accurately and also have testing and production phase (A005).</i>
	<i>Performance measures are explained by the team leaders during regular team meetings where opportunity is provided to clarify any doubts (A005).</i>
	<i>I am satisfied that there is a clear communication about the KPIs from top-down i.e. higher level to staff (A006).</i>

(Developed for this study from responses to questions Q7 of the employee interview protocol)

The respondents felt that employees had a vital role to play in the OBPM process as the entire process revolved around them as they participated in the system implementation and contributed to achievement of strategic goals and objectives. The respondents felt that the PIB branch had human expertise with Microsoft and technical skills such as SQL, SSRS (Visual Studio), Java and other applications that was used for the development of the PIP. The technical specialists designed IT systems and maintained data warehouse, which stored performance data and linked multiple databases across the organisation. Using the well-designed IT systems, the technical specialists worked closely with the executives, management and all the major functional areas across the organisation and measured the progress being made towards the achievement of the organisation's business objectives. This created performance efficiency, promoted accountability, ensured higher level of transparency and improved the quality of decisions made by the stakeholders. Table 13 displays responses related to the employees technical know-how.

Table 13: Respondents perspectives on technical know-how

Theme	Supporting Comments
Technical Human expertise	<i>We have technical staff with experience and expertise in SQL and SSRS (Visual Studio) (A002).</i>
	<i>We have Knowledge and technical skills including SQL, SSRS and SIS for reporting purposes (A004).</i>
	<i>PIB team is made up of technical specialists who are really good at developing databases and generating performance reports (A005).</i>
	<i>Managers and staff have technical background like Java and really good with SQL i.e. writing queries using SQL (A006).</i>
	<i>We have technical staff with skills such as SQL, SSRS and Java (A007).</i>

The majority of the respondents felt that the organisation had skilled human capital to facilitate the use of the system, while one staff felt otherwise and expressed that the organisation had limited required competencies to operate the system. Another respondent felt that the workforce skills analysis needed to be conducted to identify the skills the organisation currently has, which would enable comparison of these skills with the competencies required to accomplish the top-level goals and objectives.

The literature review revealed that no prior research had been conducted in relation to employees' know-how. This study could therefore contribute towards extending the knowledge around this impact, and specifically within a state government in Australia. As such this study could facilitate individual understanding of the effects of employees' know-how on the use of OBPM in the real-life context. Thus the current study provided new insight into the impact of employees' know-how and employees understanding of KPIs on the use of OBPM.

4.2.7 OBPM-related training

Respondents were asked for their perception of the opportunities for professional development, resources and support provided to assist them to use OBPM. Overall, the respondents indicated that they were provided support and opportunities for professional development and undertook trainings including: on-the-job, SQL refresher, Central State Patient Administration System (CSTPAS) and leadership. This finding validates the study undertaken by Primarisanti and Akbar (2015), Tung *et al.*, (2011), Emerson (2002) and Cavaluzzo and Ittner (2004, p. 249) who each posited that organisations that employed appropriate training with respect to the use of PMSs across different business levels were able to enhance the knowledge and skills of employees in developing, implementing and using the PMSs systems.

The typical responses outlined below were from the respondents in relation to the professional development opportunities for the employees:

- Of the seven respondents, two of them stated that the employees get the opportunities for leadership training;
- Three respondents stated that SQL refresher training was offered to the employees;
- Four respondents stated that they received in-house training;
- Two respondents felt that the employees were provided training on CSPAS system; and
- Two employees stated that employees did not receive any formal training.

The majority of the respondents expressed that they undertook on-the-job training and systems training which strengthened their performance reporting skills and technical skills. Two respondents indicated that employees, in leadership positions or aspiring leaders, were identified by executives to undertake training on leadership which enabled them to lead. With the fast pace environment in Case A, it was considered vital to provide leadership training to employees to improve their leadership and professional skills and thus retain high performers. These trainings enabled them to: lead performance management activities; lead and build culture of performance; identify formidable performance issues; suggest solutions; build high-performance teams; and help staff understand how their individual goals aligned with strategic direction.

“Executives identified people to go on leadership training which helps staff to lead the high performance teams and performance management activities” (A002).

“There are some staff who have been identified to undertake leadership training so that they are able to help staff align their individual goals with the strategic priorities of the organisation” (A005).

This study found that PMS-training allowed users to understand performance measurement concepts and principles and provided both employees and managers with an opportunity to operate the system. Likewise, Primarisanti and Akbar (2015) found that PMS-related training enabled government employees to understand, accept and feel comfortable with the system, which in turn, alleviated depressed feelings or confusion among the employees resulting during the implementation process.

In the negative aspect, the respondents expressed that there was no formal training program provided for frontline employees to understand why certain data was collected and the importance of accurate and complete data entry. As a result, they did not fully understand what OBPM was and what was in it for them. Another respondent felt that there was a lack of opportunity for employees to perform analytical work. Lack of analytical work limited the staff’s ability to see the big picture, that is, to drill down into high-level data to find, understand, and interpret trends, patterns and anomalies.

“I have not had any formal training and as a result I do not fully understand the OBPM process” (A001).

This finding matches with the finding of the study undertaken by Cavaluzzo and Ittner (2004, p. 249) wherein they argued that insufficient training resources led to the failure in undertaking normal development procedures and thus increased the risk of failure of the system.

4.2.8 OBPM usefulness

This theme illustrated employees' positive perception of the usefulness of OBPM and their acceptance of the system. Overall, the respondents agreed that their current OBPM system was useful. The usefulness of OBPM was identified through the multiple uses of the system including strategic, reporting and decision-making. Employees' positive perceptions of the usefulness and effectiveness of the OBPM was considered the main driving factor for their acceptance of the system. This finding is consistent with the prior study of Tziner *et al.*, (2000); Murphy and DeNisi (2008); and Culberston *et al.*, (2013) who suggested that the acceptance of PMS by employees was a significant factor for its success.

The respondents' perception of the usefulness of OBPM was that they were relatively satisfied with the contribution that OBPM made to delivery of Case A's strategic and operational outcomes including its ability to:

- Generate performance reports
- Contribute to performance improvements
- Hold service providers accountable
- Inform decision-making
- Improve transparency
- Contribute to service planning
- Facilitate costing and funding
- Ensure efficient use of resources
- Helps meet the organisation's business objectives.

The respondents felt that OBPM contributed toward achieving strategic purposes including the achievement of organisational goals and objectives, promoting accountability to stakeholders and ensuring high level of transparency. This finding is consistent with the previous research findings of Verbeeten (2008, p. 430) and De Bruijn (2002) who asserted that PMS was used to promote accountability and transparency, which allowed politicians and public managers to account to the public on how taxpayers' money was spent. Wojtczak (2002) and Erlendsson (2002) asserted that PMS contributed towards setting and achievement of strategic organisational goals and objectives.

The respondents indicated that in order to achieve strategic purposes, the OBPM system displayed three key attributes:

1. OBPM was essential in promoting accountability to stakeholders;
2. OBPM ensured high level of transparency in the system, for instance, the online performance information portal shares information about the performance of the organisation; and
3. OBPM provided the opportunity to demonstrate how efficiently and effectively the organisation is achieving its goals and objectives.

Six respondents felt that the usefulness of OBPM was concerned with accountability and transparency. The respondents expressed their belief that OBPM assured accountability to community, taxpayers, Government (Central State Treasury, Central State Parliament and Central Office of Auditor General), Australian Institute of Health and Welfare (AIHW) and Productivity Commission and funding agencies such as Commonwealth Department of Health and Independent Hospital Pricing Authority. OBPM ensured greater accountability for expenditure as it provided information to the Finance and Performance Committee on organisation's performance against service and activity levels and the management of resources applied for the delivery of these services as set out in the Service Agreement reports back on its performance to national agencies like Independent Hospital Pricing Authority. This perspective was expressed by analysts in PIB branch.

“OBPM holds service providers accountable and ensures taxpayers’ money is spent wisely (A002) and OBPM holds service providers accountable against agreed performance indicators” (A005).

Two analysts from PIB indicated that OBPM improved transparency as it provided clear and transparent outline of performance targets, how performance is assessed and responses to performance issues. The findings indicated that the organisation implemented Performance Information Portal (PIP) which encouraged real time reporting and enabled the organisation to monitor and report on real time performance data reliably.

“OBPM ensures transparency, it brought performance reporting live via demonstrating data to the end users such as clinical staff and executives by providing live data on PIP and Case A Executives can view live data related to patients in ED, ward transfers and so forth” (A007); “OBPM enhances transparency and the more the transparency and the more information you can produce the better” (A005).

One interviewee said OBPM enabled the senior executives to measure the progress being made towards the achievement of organisational business objectives: *“OBPM helps the executives to measure the progress being made in meeting the objectives of Central State which is the provision of health services to the community”* (A001). This finding is in line with previous findings of Wojtczak (2002); Erlendsson (2002); Drucker (2006); Biron *et al.*, (2011); Buick *et al.*, (2015); and Lewis (2015) who asserted that PMS helped in setting and achieving strategic organisational goals and objectives.

This study also identified that the measurement and reporting of key strategic, accountability and operational measures was a strong characteristic of OBPM. This finding is consistent with the previous research findings of Verbeeten and Spekle (2015), Verbeeten (2008, p. 430) and De Bruijn (2002) who claimed that PMS facilitated monitoring and reporting of relevant information on organisational performance. Similar findings were obtained in studies conducted by Streib and Poister (1999) and Bouckaert (1993) wherein the PMSs characteristics were described as its ability to track performance overtime as well as measuring quality of programs and services; compiling and distributing performance data in a timely manner. The authors described this as a strength of PMS.

The respondents noted that OBPM facilitated regular performance reporting, which in turn permitted assessment and reporting of the organisation’s performance requirements as set out in service level agreements. In other words, OBPM allowed measurement and reporting of KPIs (strategic, accountability and operational indicators) which demonstrated progress made by the organisation in meeting its planned targets as set out in its operational plans and achievement of outcomes as stipulated in the Central State Plan (Central State and Municipal Services, 2008). The KPIs and their contextual service measures were grouped under the five performance domains: safety and quality; service access and patients flow; population health; finance; and workforce.

These performance reports showed how the organisation had performed during the reporting period and ensured transparent reporting and accountability. The KPIs such as patient through-put, critical incidents, discharge times, patient transfers, length of patient stay and re-admittance benefitted strategic and operational performance while supporting the quality and efficiency of patient care. Table 14 displays responses related to the usefulness of OBPM in generating performance reports.

Table 14: Usefulness of OBPM in generating performance reports

Theme	Supporting Comments
Usefulness of OBPM in generating performance reports	<i>I use OBPM for compiling six monthly financial reports and performance reports from the non-government organisations NGOs (A001).</i>
	<i>I use OBPM including software like SQL, Excel and R to report operational data. Operational level performance measures are reported internally to operational managers, directors and executives on regular basis and are accessible to everyone via PIP e.g. these reports help to release the pressure at the emergency department, with all the flow in the hospital (A002).</i>
	<i>I use OBPM to produce reports related to cross border data such as Central State patients seeking particular kind of treatment in NSW (A003).</i>
	<i>I use OBPM to generate and report on accountability indicators for Central State executives bi-monthly. This quality and safety performance indicators is a measure of hospital performance such as hospital mortality rate, number of falls in the hospital, discharge summary (A004).</i>
	<i>I use OBPM to prepare monthly scorecard reports which include operational performance measures for Women, Youth and Children Clinical Unit (A005).</i>
	<i>I use OBPM to prepare regular monthly reports for Finance and Performance Committee pertinent to national data including national weighted activity unit in the areas of admitted, non-admitted and emergency department (A006).</i>
	<i>I use OBPM to prepare reports on cross border patients as well i.e. patients from other jurisdictions get treated at the Pioneer Hospital and Central State patients treated in other jurisdictions (A006).</i>
	<i>OBPM is used to reports on strategic and accountability Indicators, which are agreed every quarter and the variance are reported on monthly basis. If the variance between target and actual is more than 5% then written explanations have to be provided by the respective clinical units (A006).</i>

(Developed for this study from responses to questions Q1-Q3 of the employee interview protocol)

Respondents' comments suggested that OBPM provided valuable information to the decision makers. Similar conclusions were reached by Blackman *et al.*, (2013), Padovani's *et al.*, (2010) and De Bruijn (2002) who claimed that PMS improved the quality of decision made by top management and customers. The respondents highlighted the role of OBPM in improving the quality of decisions made by all stakeholders within the health system such as government, executives, managers, and the customers.

The key findings emerged from this study pertinent to OBPM's ability to guide decisions about: efficient use of resources; service planning; appropriate allocation of funding and better service delivery/ performance improvements. The respondents said the organisation has significantly re-engineered IT infrastructure of their traditional operating systems by implementing new PIP and Emergency Department (ED) Live, which enabled Case A internal and external stakeholders to view real-time activity in many areas of the organisation. The technological advancements had improved efficiencies and led to cost savings.

Case A executives use real time data to make better tactical decisions to high-volume and fast paced front-line operational decisions. This in turn supported a wide range of medical and healthcare functions, such as clinical decision support. Two respondents expressed that OBPM informed management decision-making, which was driven by business intelligence such as PIP and ED Live. This perspective was expressed by analysts in PIB.

Two respondents felt that OBPM enabled customers to make better decisions. For instance, the respondents believed that the real-time reporting helped clients make decisions about the best treatment options available to them, which in turn improved strategic objectives of improving patient journey and contributed to the sustainability of the health service. Clients use this information to decide which services to access and consider alternative services for less urgent medical needs.

One respondent said that OBPM contributed to the formulation of service plans. The respondent said:

“In terms of service planning, the service planning group use the performance data generated via OBPM to determine what services are needed, what is the cost of service delivery, what can be improved and if we have enough doctors etc. For example, if you would like to set up a particular health service in the Central State and you would like to know if you are seeing enough patients who have that kind of issue or do we have patients going to NSW for a particular treatment and how much could we save if that health service is offered in Central State instead of people going to NSW. I produce reports and use the data for analysis and planning and provide it to service planning area or to doctors in the hospital” (A003).

These plans improved organisational performance and accountability and enabled delivery of quality health services efficiently and effectively. The respondent felt that OBPM informed service planning and decision-making by providing information on what, how, where and to who the services needs to be delivered; service demand and costs and drivers of these. In Case A, the service plans included outcomes-based objectives and set of coordinated actions that delivered the services underpinning those outcomes. The services were the outputs of the organisation and in this case included health services. These outputs were linked to the top-level goals/objectives of Central State Plan and Statement of Government priorities in key outcome areas, which was quality healthcare and timely access to healthcare.

OBPM’s contribution to performance improvements were noted in six responses. The data revealed that OBPM helped to stimulate performance improvements by identifying and implementing opportunities for improvements to organisation’s current health care delivery systems. For instance,

OBPM was used to provide feedback to clinical practitioners on their performance relative to their peers. These feedback systems facilitated widespread improvements in performance. The Health RoundTable reported on Case A's clinical unit's performance against most comparable peer health services across Australia and New Zealand on key performance measures. It was used as the national benchmarking tool to achieve best practice and to identify weaker areas and how they can be improved, find new or different ways to do things, develop strategies to improve operational practices and performance in the organisation and where efficiency could be increased.

OBPM's contribution to performance improvements were noted in five responses. Table 15 demonstrates OBPM's contribution towards performance improvement.

Table 15: Usefulness of OBPM towards performance improvement

Theme	Supporting Comments
Usefulness of OBPM towards performance improvement	<i>OBPM is used to facilitate better performance of the organisation. For example, I aim at providing correct data at the right time to the doctors and nurses to facilitate their jobs, which contributes towards provision of better patient care (A002).</i>
	<i>OBPM contributes towards performance improvement e.g. where we benchmark Central State's performance with other jurisdictions and national indicator and we can see how well we are doing (A003).</i>
	<i>It assists in performance improvements, particularly improving patient care (A004).</i>
	<i>The report is used to review performance of clinical units, is used for performance improvements in weaker areas and increase efficiency (A006).</i>
	<i>In terms of performance improvement, Health Round Table known as HRT uses data from Pioneer Hospital and does benchmarking with peers in terms of population and level of service to achieve best practice to improve operational practices and performance (A007).</i>

(Developed for this study from responses to question Q3 of the employee interview protocol)

The respondents felt that OBPM facilitated provision of better patient care where patients were the central focus of everything the organisation did and this patient-centric care was delivered within a workplace culture that showcased Case A's values of care, excellence, integrity and collaboration.

Three respondents felt that OBPM enabled appropriate allocation of funding and resources and ensured efficient use of the resources. Similar conclusions were noted in the studies undertaken by Padovani's *et al.*, (2010) and De Bruijn (2002) who argued that PMS facilitated appropriate allocation of funding and efficient use of resources. The findings revealed that OBPM also ensured that the operating funds, capital works funds and service outputs required of the organisation were being managed in an appropriate and efficient manner.

The respondents expressed that this was achieved by designing sustainable services that delivered health outcomes efficiently and embedded a culture of research and innovation within the

organisation. This supports the findings of Tuan and Venkatesh (2010) who examined how organisational culture promoted innovation. *“The main purpose of the use of OBPM is for costing and funding, that is, in order to obtain funding – based on the activity or services provided, we have to provide report on the expenditure to Finance and Performance Committee,”* said one respondent (A003). Another respondent stated: *“OBPM helps in obtaining funding from government for Central State”* (A007). *“OBPM helps with budget and resources.”*

On the negative side where the respondents did not see OBPM as fully effective, they clearly indicated a number of significant issues that prevented OBPM system from achieving its core purpose: OBPM was seen as a compliance exercise; substandard and incomplete performance reports submitted by NGOs; poor or inaccurate data entry which limited the ability to produce accurate reports for decision-making; use of multiple disparate source systems; performance reports which were generated manually were time consuming and duplicated; and different approaches and methodologies used by the technical staff caused confusion and inconsistencies.

The use of multiple dispersed information systems was common complaints made by the respondents. Case A used many information systems that were linked in some way. The dispersed IT infrastructure produced a number of issues. There were over 250 different systems in place across Case A that held performance data and this created complexities around collection, storage and reporting of consistent information on the 1.5 million episodes of care that Case A provided each year.

A senior policy officer who was responsible for assessing and reporting of NGOs performance results via regular monitoring of progress toward achievement of the outputs as set out in their service funding agreements expressed that OBPM was ineffective, chaotic, messy, sloppy and was perceived as a tick-and-flick exercise.

“My strong opinion is that OBPM does not work well at all as people do not take performance reporting seriously and see it as just a tick off task and administrative burden.....some NGOs have not submitted their performance reports and financial reports, in some case they have submitted substandard reports and there are a lot of inconsistencies and these reports are being accepted by the organisation.” (A001).

Another pitfall identified by the respondents was that performance reports which were compiled manually were time consuming and duplicated: *some reports are duplicated and time consuming – PIB is trying to improve the reporting by removing paper-based scorecard and excel based system* (A005) and *we prepare monthly performance reports manually* (A006).

Despite, consensus that the current OBPM system delivered Government and Case A’s strategic priorities, it tended to be limited in scope. The usefulness was limited because of the rudimentary nature of methodologies and processes, poor data quality and OBPM was considered as compliance exercise. On balance, the OBPM system appeared to be work-in-progress and partially successful in meeting performance expectations, which needed improvement. The responses suggested that although OBPM was perceived as useful, there was considerable room for improvement. The respondents spoke of the need to improve the use of OBPM system. Three respondents clearly articulated that the quality of data entry needed to be addressed and the responses were shown in Table 16.

Table 16: Responses related to perceived improvements to the quality of data entry

Issue	Supporting Comments
Improvements to the quality of data entry	<i>People capturing the data need to understand the importance of the data and have to capture the data diligently. Data related to patient needs to be captured and reported accurately, so that the government can provide the adequate funding for the operation of the hospitals (A002).</i>
	<i>The other really critical issue that needs to be sorted out is the accuracy of the data entry i.e. if the data entry is inaccurate and missing, it limits the ability to produce accurate report for decision-making (A003).</i>
	<i>Sometimes experienced issues with the quality of coded data – they are not accurate as they do not reflect all the information about the admitted patients since there will be some missing information. For example, sometimes administration staff (with limited clinical knowledge) misses to enter all the details in the system from the progress notes made about the patients by the doctors (A004).</i>

(Developed for this study from responses to questions Q4 of the employee interview protocol)

4.3 Conclusion

This chapter has presented the research findings against the first research question: *How does the employee engagement influences the use of OBPM in Case A.* Considerations of RQ1 has highlighted key themes and employees’ strong understanding of the usefulness of OBPM system, employees’ strong understanding of KPIs and employees’ competencies are all seen as important factors which may impact on the use of OBPM in the case organisation. Conversely, lack of employees’ participation in the planning and KPI development process at strategic level, lack of employee engagement in the design of OBPM system and lack of formal professional development opportunities and dispersed IT system may result in OBPM system being partially useful.

Chapter 5 Findings, Result and Discussion

RQ 2: How does the organisational culture affect the use of OBPM in Case A?

The previous chapter presented case data finding and results related to the first research question. The objective of this chapter is to present the case data findings and results in relation to the second research question which examined the impact of organisational culture on the use of OBPM in the case organisation.

5.2 Impact of organisational culture on the use of OBPM

Based on the interviews conducted with a group of executives and senior managers, this section presents data with respect to the research question 2:

How does the organisational culture affect the use of OBPM in Case A?

The senior executives and managers were asked for their perception of the impact of organisational culture on the use of OBPM. The responses identified three major themes:

- Performance management culture
- Silo culture
- Weak evaluative culture

5.2.1 Performance Management Culture

The study revealed that Case A uses OBPM to encourage a performance management culture which was structured around five phases of OBPM framework as shown in figure 11. The performance management culture reflects an organisational culture that encompassed clearly defined organisational goals, objectives, desired outcomes and indicators, delivery of programs and services, monitoring of performance against targets and seeking out empirical evidence to better manage and deliver its programs and services, and thereby improve its performance. The findings suggested that Case A's performance management culture encompassed core values, behaviours and expectations that dictated the way the organisation was run.

The respondents felt that Case A's performance management culture also referred to the systematic approach to managing performance of teams and individuals in the organisation. The performance management culture in Case A rewarded employees for meeting and exceeding their goals and objectives. The performance management culture enabled the organisation to attract, recruit, develop and retain the right talent and allowing employees to have access to trainings to ensure

they experience continuous professional growth, and to position them to reach their goals and objectives. The performance management culture facilitated fair employment conditions for all employees and they were covered by the enterprise bargaining agreement (EBA).

The result suggested that Case A's performance management culture was structured around five phases of OBPM framework which provided for: planning and selecting key performance indicators; budgeting, delivering health services/programs; monitoring and reporting on performance; and evaluation.

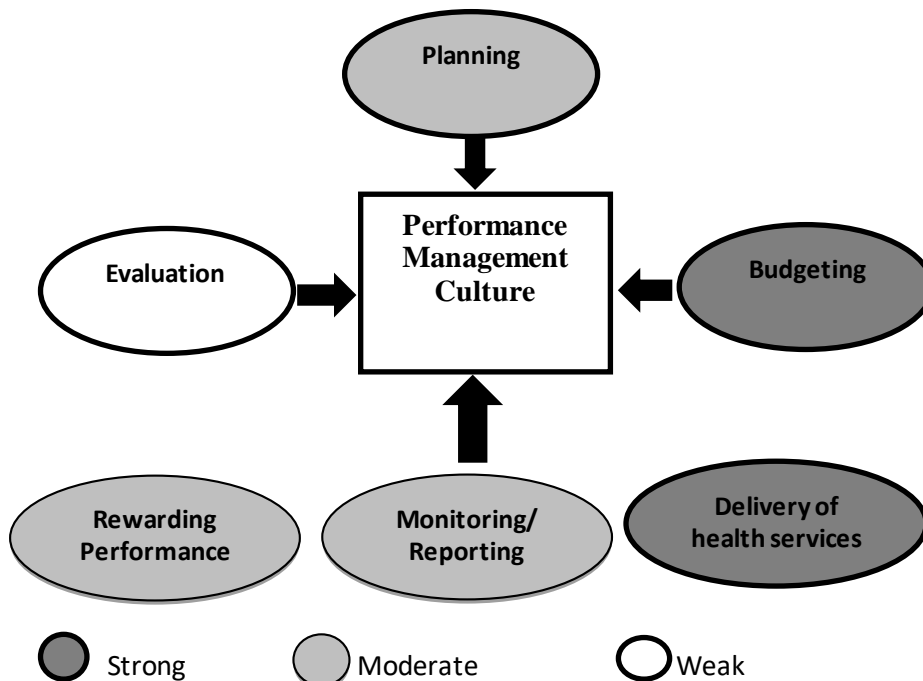
The respondents felt that the OBPM framework operated in the following way:

- The Central State Government specified, via outcome statements, the outcome it is seeking to achieve in the health care sector;
- Case A through the planning process developed goals, objectives, strategies, and implementation plan to achieve its goals and objectives;
- Central State Parliament appropriated funds, on a full accrual basis, to allow Case A to achieve these outcomes through organisational outputs;
- Case A specified the nature and full accrual price of their outputs;
- Case A established a set of KPIs that addressed all key aspects of the organisation's performance and to allow for scrutiny of efficiency, that is, the price, quality and quantity of outputs.
- Case A established a set of proxy outcome effectiveness performance indicators. These indicators allowed for assessment and monitoring of operational performance of the hospitals and was mainly used for internal purposes;
- Case A implemented programs and activities to deliver high quality health care services in the Central State;
- Case A discussed its performance against its efficiency indicators (price, quality and quantity of outputs) in its annual reports; and
- Case A also discussed its performance using measures or indicators that are additional to the performance indicators published in Case A annual reports. The indicators used include monthly scorecards, internal reporting against operational indicators and proxy outcome indicators, corporate and business plans, client and staff satisfaction surveys and benchmarking data.

Figure 11 shows the components of the performance management culture that is exhibited in the case organisation. Budgeting and delivery of programs were identified as strong features of Case A's performance management culture, while planning, monitoring/reporting and rewards were

recognised as moderate components. The evaluation component remained weak with limited feedback to planning.

Figure 11: Performance management culture displayed in Case A



(Developed for this study from responses to questions Q 8 & 9 of the manager/executive interview protocol)

1. Planning

The findings revealed that the performance management culture contributed towards planning. The respondents were asked for their perception of OBPM’s contribution toward Case A’s strategic planning. Almost one third of the respondents indicated that OBPM contributed Case A’s strategic planning. The respondents indicated that the planning process allowed Case A to align top level Government outcomes and priorities with Case A’s vision, values and strategic goals as outlined in Case A’s Corporate Plan. For instance, Territory-Wide Health Services Framework 2017-2027 aligned with the Central State Government’s 10-year health plan and focused on providing best possible outcomes for community within three key focus areas: preventive health care; community-based care and care in hospital. This finding is consistent with the past research findings of Garg and Deshmukh (2012) who suggested that PMS assisted in strategic planning by providing a framework to define the vision, strategic objectives priorities and KPIs. In their study, the authors presented a practical PMS model for managers to use in strategy formulation and implementation.

The result of this study showed that Case A used OBPM System, which placed high emphasis on outputs. The Director General of Case A was explicitly responsible for the delivery of health services programs (outputs). Table 17 provided respondents’ perceptions of the extent to which emphasis

was placed on outputs of the organisation. A similar finding was noted in Ho's (2005) study which focussed on output-based PMS entailing accountability, efficiency measures and budgetary decision-making.

In addition, the identification of the top-level Government outcomes and priorities, the respondents expressed that the planning process allowed them to identify outputs. The outputs described Case A's key deliverables stipulated in the Central State's Budget Papers. Case A's outputs were measured against the accountability indicators which were linked to strategic objectives and measured the organisation's effectiveness and efficiency in delivering its outputs. Accountability indicators related to outputs which Case A produced through its activities. The inputs were then identified and aligned with the Government desired outcomes and outputs. These include resources such as staffing and funding to produce outputs.

Table 17: Output focussed

Issue	Supporting Comments
<i>Output oriented culture</i>	<i>I think there is still emphasis on outputs and I think there is confusion between what an outcome is and what an output is. We are tracking SFAs of NGOs, they provide performance reports on their achievements of outputs without necessarily linking them to outcomes. The outputs are defined in the SFAs and the NGOs are required to report on the achievement of outputs on 6 monthly basis (A008).</i>
	<i>People are focussed on outputs and most of these outputs are irrelevant to the outcomes and they are not directly correlated. People are focused on achieving particular matrices which does not actually achieve a good outcome for the health service (A010).</i>
	<i>We are still output focussed and have poor patient outcomes in the Central State and Case A remains the most expensive hospital in the country. Ultimately the government needs to be held account on these measures (A012).</i>
	<i>We measure and report on outputs (A013).</i>
	<i>From the performance information perspective, the focus is on outputs, programs and staff rather than patient outcomes (A014).</i>
	<i>In an overarching sense, Health has adopted inputs and outputs model (A019).</i>

(Developed for this study from responses to questions Q8 of the manager/executive interview protocol)

Jalaludin and Nabiha (2018) indicated that output measures had limitations as it only provided quantitative information on outputs and services delivered and the authors suggested the use of outcome measures for the monitoring and reporting of the organisational performance. Nonetheless, this study indicated that Case A placed emphasis on clinical outcomes and used proxy outcome indicators to measure the effectiveness of the service being delivered. This finding was noted in Likierman's (1993) study who highlighted the use of proxy outcome indicators, particularly, by the Health Departments to measure the impact of health interventions.

Table 18 shows respondents' perception of the outcome-oriented culture exhibited in the case organisation. This is consistent with what has been found in the previous findings of Baird *et al.*, (2012) who posited similar reasoning for the use of outcome-oriented culture in the public sector.

Table 18: Outcome oriented culture

Issue	Supporting Comments
<i>Outcome oriented culture</i>	<i>We use proxy outcome measures - a broad example of the proxy measures such as the overarching outcome of reducing cancer and I think it is common knowledge and generally accepted that smoking causes cancer so one of the outputs is reduction in smoking or counting the number of who smoke (A008).</i>
	<i>We use this as a proxy measure for overall outcome, outcome measure for cancer patients' is 5 year survival rate, so the proxy outcome measure for good cancer outcome, which is good cancer care provided to patients in timely fashion and we use this as a proxy measure for overall outcome (A011).</i>
	<i>From clinical perspective, doctors discuss about the patient outcomes but that is not reported up (A014).</i>
	<i>I strongly agree that Case A displays outcome-oriented culture as we are working progressively towards outcome measurement (A018).</i>
	<i>I think staff focus on clinical outcomes – they are very much focussed on the patients in front on them (A020).</i>

(Developed for this study from responses to questions Q8 of the manager/executive interview protocol)

2. Activity Based Budgeting

The respondents indicated that performance management culture enabled Case A to receive funding through Activity Based Budgeting (ABB) that helped the organisation to achieve high-quality health care and improved health outcomes. The respondents described ABB as a method of budgeting based on an activity framework, using cost driver data (identified through activity-based costing) in the budget setting and variance feedback processes. As its name suggested, ABB focused on activities and was based on the type and volume of services it provided, and the complexity of the patients it served. Under ABB, Case A's revenue was linked to its activities, that is, it provided a way to accurately report hospital activity and ensured adequate funding is allocated to continue operations through the next budget. ABB quantified hospital outputs by use of classification systems.

The respondents indicated that ABB created incentives for reducing wait lists, increasing hospital quality, productivity and efficiency and improving transparency in funding. It also allowed for executives to have increased control over the budgeting process and to align the budget with the overall goals and objectives of the organisation. ABB allowed Case A to establish the outcomes, strategic objectives (provided at Appendix F), strategic indicators, outputs, accountability indicators (provided at Appendix G) for Case A and Central State Local Hospital Network (provided at Appendix H) and they were set out in the Budget papers. These indicators were agreed by the Central State Legislative Assembly and formed part of the formal process. This finding is consistent with the past

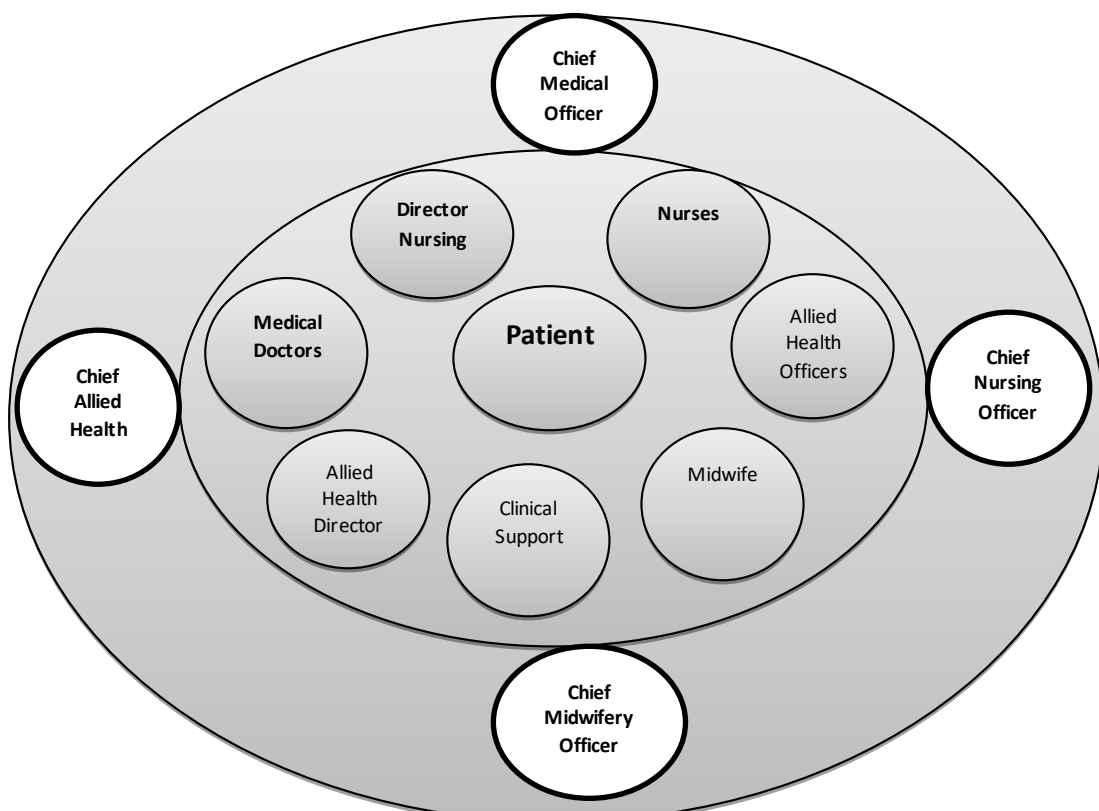
research findings of Lin and Yahalom (2009) and Muras *et al.*, (2008), who highlighted the significance of ABB budgeting as an excellent operational/bottom-up view which effectively allocated cost to activities and outputs.

3. Delivery of high performing health services and programs

The findings revealed that a performance management culture allowed the case organisation to deliver high performing health services and programs. The literature review indicated limited studies in this area which provided an opportunity for future research. The respondents expressed that Case A's core function was to deliver health services and programs through two hospitals: a tertiary and a metropolitan hospital. The respondents expressed that Central State delivered high quality, person-centred care and efficient and effective health services to approximately 400,000 people in the Central State and a further 200,000 people for the surrounding areas.

Figure 12 below showed the respondents' perception of person-centred approach which involved consumers in planning and decision-making process, seeking and using feedback from consumers, consumer representatives, and community organisations to inform improvements. The respondents indicated that Case A had undergone and continued to undergo significant changes and endeavours to be a high-performing health service provider that delivered person-centred, safe and effective care. In doing so, Case A continued to promote and implement its vision and core values.

Figure 12: Person-centred health service



(Developed for this study from responses to questions Q1-Q17 of the manager/executive interview protocol)

The respondents indicated that the high performing health services were planned and delivered around the patient journey, that is, the services were delivered as detailed in the Service Level Agreement between the Central State Minister for Health, Director General, the LHN and Case A. The respondents felt that Quality Strategy 2018-2028 helped Case A to deliver person centred, safe, effective and efficient care. The Strategy not only helped the organisation to fulfil its ambition of being high performing health service provider but also improved quality across the organisation.

The respondents indicated that Case A continued to accredit against National Safety and Quality Health Standards in order to deliver high performing health service, improve quality of health care and protect the public from harm.

4. Capturing data and monitoring performance

The respondents indicated that a performance management culture enabled Case A to capture performance data and monitor performance of the organisation. This finding aligns with findings of Jalaludin and Nabiha (2018) who identified regular measurement and reporting of performance for programs, organisations or individuals as one of the functionality of PMS.

The respondents indicated that performance measurement involved the timely and relevant collation, monitoring and analysis of performance data. The collection of performance data allowed regular and complete monitoring of performance of the organisation which in turn resulted in effective risk management and strengthened accountability. Performance data was gathered and analysed internally within Case A by set timeframes which provided meaningful picture of the organisation's performance.

The organisation used performance benchmarking for data analysis. Performance benchmarking focused on establishing performance standards and standard indicators that have raised awareness of performance issues and initiated improvements in healthcare. In order to improve operational effectiveness, Case A had determined key performance objectives and established benchmarks particularly in the clinical areas.

In terms of the performance data from the NGOs, a senior manager stated that they have developed templates and spreadsheets to capture financial and non-financial data and monitor actual results against the outcomes and outputs stipulated in the schedules and SFAs.

Reporting

The findings indicated that performance management culture enabled Case A to report performance data. The respondents were asked for their perception of how the performance measures report on whether Case A is meeting its business objectives. On the whole, the respondents agreed that the

performance measures reported on whether or not Case A was meeting its business objectives. Table 19 shows respondents' views on how performance measures report on whether the organisation is meeting its business objectives.

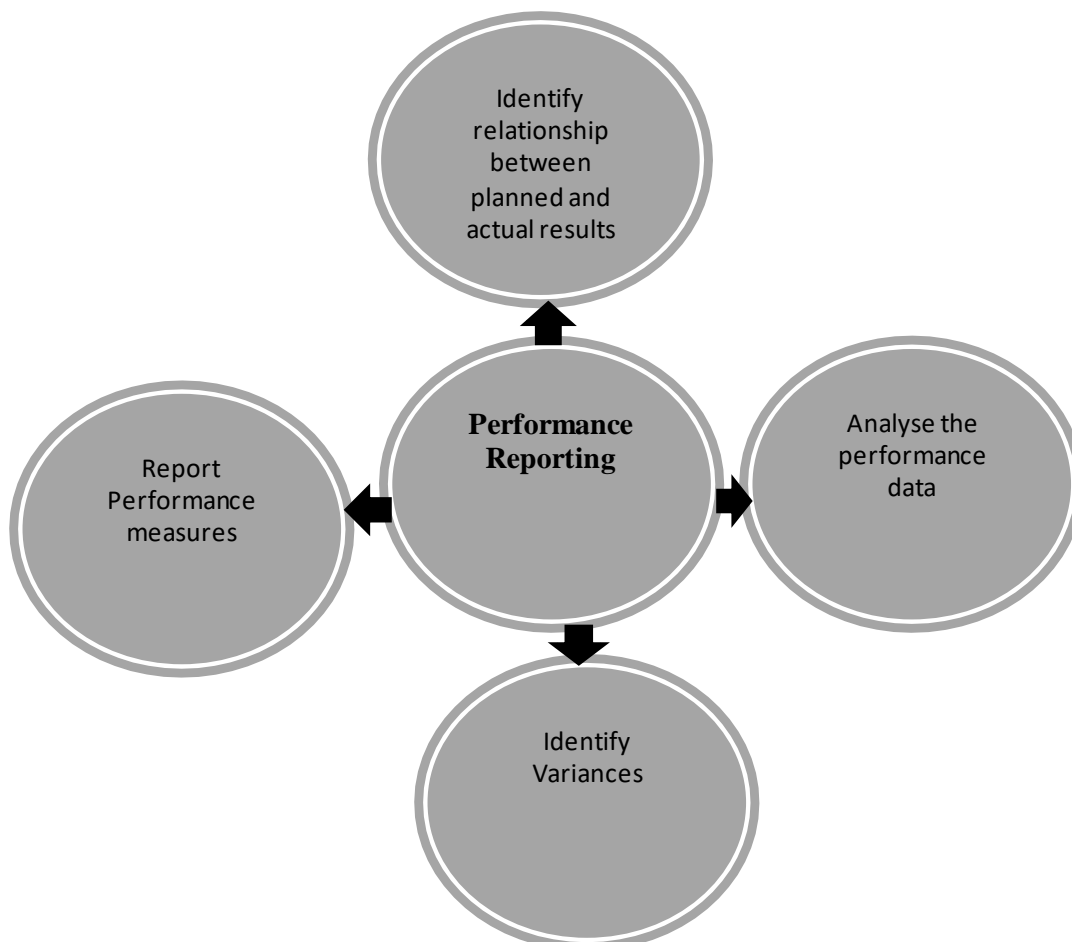
Table 19: Respondents perception of how performance measures reports on whether Case A meets its objectives

Issue	Supporting Comments
<i>Performance measures reports on achievement of Case A's objectives</i>	<i>One of Case A's business objectives is the delivery of better and efficient patient care - I use performance information submitted by NGOs as a mechanism to drive evidenced based policy which helps with continuous improvements in providing better and efficient patient care (A008).</i>
	<i>Achieving operational efficiency is one of business objectives of the organisation and I am responsible for the indicators related to the recruitment and rostering of junior doctors that contributes towards the efficiency of the hospital (A009).</i>
	<i>Performance measures in Population Health Division do report on whether or not we meet some of business objectives (A010).</i>
	<i>Case A's business objective is to provide patient care in a cost-effective manner, so the performance information related to budget management ensures that people are able to provide good care within their budget (A011).</i>
	<i>The accountability and strategic performance measures are reported to Central State Legislative Assembly though the annual reports which indicates whether Case A has met its strategic priorities articulated in the Budget Papers (A013).</i>
	<i>Performance information such as NEAT and NEST report on Case A business objectives related to timely access to health care (A014).</i>
	<i>The accountability and strategic performance measures that are articulated in the Central State annual reports, they absolutely do measure the basic measurements of waiting times, patient's elective surgery, lack of readmission and those sort of things and these measures contribute directly towards what we are doing in meeting business objectives but that is only small percentage of the business objectives (A016).</i>
	<i>The monitoring of the financial reports and patients outcomes indicates whether the organisation is meeting its objectives efficiently and effectively (A017).</i>
	<i>The performance measures such as prevalence of smoking amongst mental health patients, drug and alcohol clients and Aboriginal and Torres Strait Islander People reports on the health outcomes of the Central State population and therefore reduced smoking rate is one of the business objectives of Case A (A018).</i>
<i>The strategic objectives, accountability indicators, output classes, operational measures and national benchmarking indicators (HRT), they all report on whether Case A is meeting or not meeting its business objectives (A019).</i>	

(Developed for this study from responses to questions Q4 of the manager/executive interview protocol)

The respondents indicated that Case A reported on the performance measures of both Case A LHN and Case A as no clear distinction was identified between them. The respondents noted that Case A reported from State to Ministerial and national level and at the same time it reported down to the local and operational level. The data suggested that Case A reported on a number of operational targets which were established through informal process and were articulated in the scorecards. The scorecard reports were mainly used by the executives for internal purposes for operating the organisation. Figure 13 shows characteristics of performance reporting identified by the respondents including: clarification of the relationship between planned performance and actual performance; analysis of overall performance; identification of the variances; and reporting performance information (internally and externally) in a timely manner.

Figure 13: Characteristics of Performance Reporting



(Developed for this study from responses to questions Q8 of the manager/executive interview protocol)

External reporting and accountability

The findings indicated that the performance management culture facilitated external reporting and accountability. The respondents stated that the OBPM framework enhanced public accountability through reporting of agency performance in annual reports, estimates hearings and statement of

performance to stakeholders on particular aspects of an organisation's operations. This is the main mechanisms by which Case A met its formal accountability obligations. Table 20 demonstrates Case A's accountability arrangements.

Table 20: Accountability Arrangements

Accountable entity	Accountability arrangements
Minister for Case A	Published plans and reports Estimates hearings Independent review by the Central State Auditor-General
Case A Directors-General	Service level agreements with Minister Strategic plans Annual reports
Case A Senior Executives and Managers	Executive performance agreement with Director-General
Case A Employees	Individual performance agreement with manager

(Developed for this study from responses to questions Q8 of the manager/executive interview protocol)

External reports included performance reports, quarterly reports and annual reports which were tabled at the Central State Parliament that enhanced accountability to the Parliament and the general public. The findings indicated that Case A published Chief Health Officer's (CHO) Report every two year as per the statutory obligations. The CHO Report was a major strategic driver for the health services and health improvement in the Central State.

Internal reporting

Approximately two-thirds of the respondents stated that their monthly financial management reports included financial information at outputs level and outputs were monitored against budget on a regular basis. This provided the opportunity for the information to be routinely used in organisational decision-making. The respondents identified that the main drivers for management decision-making were government priorities, the need to comply with legislative requirements, responding to stakeholders and managing emerging risks and available resources.

Case A generated a number of operational level reports for internal purposes which included scorecard indicators such as NEAT and NEST which were primarily designed to improve hospital performance. A senior executive said:

“Nurse sensitive indicators are captured and monitored on a monthly basis and the declining performances are addressed accordingly. These indicators include data such as patient fall, medication errors, patient injuries, number of patients who stay in the hospital longer than they should and number of patients who get readmitted to the hospital because they have suffered some condition that is directly related to the poor nursing at the hospital” (A016).

The respondents noted that Case A also generated a patient satisfaction report. The Health Care Improvement Division developed a suite of performance indicators to measure patient satisfaction using little tracking devices whereby patients were given a tracker and were asked to provide response to five questions about their time at the hospital. Patients also voluntarily wrote letters of praise and complaints.

Evaluation

The respondents indicated that the evaluation component remained weak with limited feedback to planning. The respondents expressed concerns in relation to the misalignment between the strategic planning and OBPM and this was discussed in detail in the section related to issues. A senior executive said:

“I can’t see the correlation between OBPM and Case A’s strategic planning. There is disconnect between the high level strategic and accountability indicators and operational level indicators (A015)”.

In addition, the finding suggested that some of performance indicators were no longer relevant and did not add value, suggesting that they had not been reviewed periodically. The respondents noted that the performance data which was collected, analysed and reported were not used to evaluate the performance indicators. Another senior executive said:

“The overall performance indicators have remained fairly static over time and does not align with the overarching strategies” (A011).

5. Rewarding performance

The respondents were asked for their views about the incentive system introduced by Case A to motivate people and encourage performance improvement. Almost one third of the respondents indicated that Case A recognised and rewarded employees for their outstanding performance through non-financial rewards. Table 21 shows respondents’ perception of the non-financial rewards that encourages strong performance in Case A. Prior studies support this finding indicating that employees get recognised and rewarded for their outstanding performance through non-financial

rewards which motivated them and serve their economic needs and psychological needs (Kloot, 1999; Bonner and Sprinkle, 2002; Lawler, 2003; Gerhart and Rynes, 2003; Swiss, 2005; Verbeeten, 2008; Tung *et al.*, 2011; Baird *et al.*, 2012; Indudewi and Nafasita, 2012).

Table 21: Non-monetary rewards in Case A

Subject	Supporting Comments
<p>Non-monetary rewards in Case A</p>	<p>We have introduced awards program where the teams and individuals get award as recognition for outstanding performance. We encourage strong performance through recognition of top performance rather than criticism of weak performance or negative results (A010).</p>
	<p>We have an annual Chief Health Officer's (CHO) Award system in Population Health Division. CHO Award system was introduced arising from a recommendation from a culture survey that was conducted by the organisation. The culture survey highlighted that the people were feeling disconnected, unclear guidance on their strategic planning and how they fitted into the organisation more broadly. So I set a framework of what we are trying to achieve and linked the CHO award with the people who contributed to achieving those things such as: recognising and working out on a way of preventing major public health emergency issues; innovative work; and involving public views on policy development and program delivery i.e. we don't just impose on restaurants, we involve and engage them right through the process, identify their needs and how do we support them better, talk to them about the plans that we need to have that results in improving outcomes of better compliance with National Standards and decrease in food borne illness (A015).</p>
	<p>In Digital Solutions Division, there is a process that recognises outstanding performance against certain expectations and awards excellence – we align this with Case A core values and there's a Committee that oversees the process. This is done on quarterly basis (A016).</p>
	<p>The Annual nursing and midwifery award calls for nominations for nurses who have excelled in the domains of clinical practice, management, research, education and quality improvements. Annually, the Chief Nurse receives 100 to 200 nominations and the panel assess those applications and vote for nurse and midwife of the year and the team of the year (A013).</p>
	<p>We provide a range of flexible working arrangements to Case A staff according to the needs of the employee and the requirements of the work unit (A019).</p>

(Developed for this study from responses to questions Q10 of the manager/executive interview protocol)

However, the majority of the respondents noted that Case A did not have a financial incentive system in place that motivated people and encouraged performance improvement in the organisation. They noted that the staff in Case A were covered by the EBA and it only provided for

base salary for employees which was payable under EBA for the employees' classification. Table 22 shows respondents' perception of lack of financial incentives available for staff in Case A.

Table 22: Lack of financial incentive system in Case A

Issue	Supporting Comments
<i>Lack of financial incentive system in Case A</i>	<i>Case A does not have an incentive system in place (A008).</i>
	<i>I am not aware of any particular incentive (A009).</i>
	<i>There isn't really an incentive system (A011).</i>
	<i>We do not have an incentive system in the organisation (A013).</i>
	<i>Case A does not have an incentive system to motivate people and encourage performance improvement. Given that people are responsible for certain things and there are unclear roles and responsibilities, the incentive is actually to not take responsibility. So it is almost a perverse incentive system to take a little responsibility as possible and take responsibility for the things which is going well (A014).</i>
	<i>No, I don't think that we have got it. I have seen no evidence of Case A introducing incentive system to motivate people and encourage performance improvements. I don't see the recognition of outstanding performance more broadly across Case A (A016).</i>
	<i>I don't know about Case A introducing incentive system to motivate people and encourage performance improvements (A018).</i>

(Developed for this study from responses to questions Q10 of the manager/executive interview protocol)

5.2.2 Silo Culture

The finding suggested that Case A had a silo culture as part of the overall organisational culture. The respondents indicated that culture of silos existed in the organisation where each function was accustomed to work in silos, made its own decisions and delivered programs and projects in isolation.

The findings of this study demonstrated that there was a lack of communication among different divisions and people were less inclined to share their ideas and opinions across the organisation. Siloed teams struggled with cross-functional problems and were confused on priorities and expectations. They displayed limited awareness of other parts of the organisation and their contribution to the success of the organisation as a whole. The case data suggested the presence of a highly diverse culture between divisions and as a result the employees encountered issues developing shared understanding of actions of their colleagues across the organisation. Thus silo culture complicated the exchange of ideas and opinions and therefore created obstacles in development of shared understanding. Table 23 displays responses related to culture of silos.

Table 23: Responses related to silo culture

Theme	Supporting Comments
Silo culture	<i>Culture of silos currently exists in the organisation, the staff mentality is that it is not their responsibility to coordinate their activities with peers (A008).</i>
	<i>There are some silos within the divisions, I do not have good understanding and visibility of what's happening across the divisions and I don't know if information filters down very well to people on the shop floor. I think that part of challenge is the size of this place and the hierarchy i.e. the number of layers it has to go through. Similarly, I don't know if the information comes up as well as it could. (A009).</i>
	<i>There tends to be organisational culture that focus more on silos rather than understanding the broader organisation views. (A010).</i>
	<i>I think there's culture of silos – there need to be continuous dialogues between leaders, managers and staff to make them understand broader objectives of the organisation and how their work fits into the bigger picture (A011).</i>
	<i>The real problem is that the leaders are too busy with too many meetings. There are many people in charge of the same matrix and they mostly work in silos and they are people pulling it in different ways and how do we solve that one (A012).</i>
	<i>It is not happening at this stage as there is culture of silos. I don't think that there is enough communication within the organisation to demonstrate the benefits of managing performance and the intent of performance management is misunderstood (A013).</i>
	<i>Since we are such a diverse organisation, some areas work in silos as there is lack of communication between different divisions (A015).</i>
	<i>I think there is still a culture of silos - there is no need for you to know this – it is not your business (A016).</i>
	<i>There's a culture of silos at the moment but I think we are getting better at it (A017).</i>

(Developed for this study from responses to questions Q7 of the manager/executive interview protocol)

This finding is consistent with the findings of Cilliers and Greyvenstein (2012) who asserted how silos as barriers fragmented organisations resulting in parts of organisations function in a manner disconnected from the others.

The respondents noted that the following factors compounded the effects of silos within the organisation and they were described below. Table 24 illustrates the causes of silos.

1. Case A was a large, complex and hierarchy structured organisation and cultural differences existed within different professional backgrounds such as medical practitioners, nurses, allied health, population health, policy officers and administrators.
2. Divided ownership of cross-business processes where business areas developed and adopted their own systems with little regard for how that affected others across the organisation.
3. The size, scale and scope of Case A required various business areas and service delivery facilities within multiple locations across Central State. This increased cultural disconnects and created a sense of separation from the rest of the organisation.

Table 24: Causes of silo culture

Hierarchy Structured Organisation	Divided Ownership of Processes	Business Units and functions are dispersed
<ul style="list-style-type: none"> • Large and complex organisation • Different professional groups • Fragmented business groups • Cultural disconnects 	<ul style="list-style-type: none"> • Service programs and projects are uncoordinated • Multiple OBPM IT systems 	<ul style="list-style-type: none"> • Multiple locations: public hospital campuses – University of Pioneer Hospital, Bayview Hospital, The Pioneer Hospital, Community Health Centres and Walk-in-Centres • Cultural disconnects

(Developed for this study from responses to questions Q7 of the manager/executive interview protocol)

This study indicated a new finding about the causes of silo culture within the case organisation including Case A being a large, complex and hierarchy structured organisation where business units and functions were dispersed with fragmented groups within multiple locations across the Central State. This increased cultural disconnect within different professional backgrounds and a sense of separation from the rest of the organisation. As a result, there was a divided ownership of processes, the service programs and projects were uncoordinated and there were a multiple OBPM IT systems within the organisation.

The result of the current study empirically demonstrated that ineffective communication was found to be an important factor contributing towards the development of silo culture in the organisation. The respondents felt that silo culture resulted in the vision of the organisation becoming fragmented resulting in lack of shared understanding of common goals and unified vision for the organisation. The case data also suggested that silo culture led to lack of systems thinking resulting in lack of understanding of the organisation wide OBPM system and its perceived benefits. As a result divisions focussed more on performance within their specific program areas rather than focusing on

providing a holistic view to improve overall performance of the organisation. This also defeated the main goal of OBPM which is to align individual performance with organisational performance, and in turn, should indicate to employees the organisation's goals, priorities and expectations and how well they contributed to these.

Prior findings support this finding highlighting that the siloed teams or groups exhibited absence of systemic thinking and the vision of the larger organisation leading to conflicts and delays in achievements of common goals (Mohapeloa, 2017 and Cilliers and Greyvenstein, 2012).

The respondents felt that the strategic goals and objectives needed to be clearly communicated to the employees to enable them to understand broader objectives of the organisations and how their work contributed to the achievement of these objectives.

A senior executive said:

"I think the feedback that we get regularly is about the communication of strategic plans and strategic directions. I think there are disconnects in this space. Communication from the executives to front line staff needs to be improved."

The respondents felt that more active communication from the leaders and managers was needed to support the staff understand broader objectives of the organisation and their roles within those broader organisational goals. The respondents expressed that a formal structure needed to be in place to ensure that the messages get to the right people to enhance their understanding of the impact it has on their work and the modifications required to effectively contribute to the organisational objectives. This finding validates the study undertaken by Marrelli's (2011) who focussed on the benefits of frequent and open two-way communication between management and employees which generated high organisational performance.

However, a senior executive expressed that Case A had a strong culture that supported continuous communication between leaders, managers and subordinates:

"I strongly agree that there is continuous communication between leaders, managers and subordinates across the Directorate and I think there is a strong culture supporting continuous improvements and performance management by outcomes and outputs".

Similarly, five interviewees emphasised that the organisation was getting better at facilitating communications activities between leaders, managers and employees. Table 25 illustrate respondents' views about the organisational communications activities.

A senior executive said:

“We are becoming a lot more structured along the lines of our ability to translate our challenge about where we sit at the national level and how we perform at the national, semi-local, local and cross-borders or work more effectively with private sector to deliver and improve services” (A016).

Table 25: Responses related to organisational communications activities

Theme	Supporting Comments
Organisational communication activities	<i>I think the communication between leaders and manager is getting better and there is emphasis on improving it (A008).</i>
	<i>I think the communication between leaders and manager is getting better, it depends very much on individuals, service area and whether the matrices are good or not (A013)</i>
	<i>I think the communication between leaders and manager has started to happen (A014).</i>
	<i>I think some areas are doing it very well - I think it depends on local leadership (A017).</i>

(Developed for this study from responses to questions Q7 of the manager/executive interview protocol)

5.2.3 Social Networking

This study demonstrated a range of benefits of using social networks at the workplace as it provide d platform for problem-solving, informal learning, peer-based learning, sharing of ideas, communication tool, source of information and act an interactive medium between leaders, managers and employees. More than a third of the respondents considered social network as an important interactive medium which helped to mitigate siloed culture within the organisation.

The respondents felt that social networks were important source of information which encouraged organisational awareness among employees on both formal and informal matters and provided a means of gaining insights into what was happening at the workplace. The respondents considered the social network as a communication tool which allowed users to create forums and groups and extend discussions outside of the formal hospital settings. The respondents felt that social networks allowed employees to share ideas, activities and events through knowledge sharing practices within their individual networks.

The work of Kyvik (2012) also support this finding who posited similar reasonings and benefits of using social networks at the workplace.

A senior executive said:

“Registered Nurses Level 2 (RN2) social network facilitates employee engagement, strengthen connections between peers and allows nurses to learn from each other in relation to motivation, organisational awareness, information and knowledge sharing, problem solving and they mentor each other to improve their task performance”.

Peer based learning was a key characteristic of RN2 social network as it enabled social and interactive opportunities for networking. Through the social network, registered nurses gathered ideas from their fellow colleagues and share information about collaborative work with them. According to the Chief Nurse, social network was an effective problem-solving platform. When the nurses encountered task-related problems, they consulted the network to obtain solutions in timely and effective manner, which in turn improved their task performance. When sharing knowledge, skills and information, registered nurses engaged in peer-based, self-directed and interactive learning outside of formal hospital-based settings. The majority of the respondents felt that the social network at the workplace provided a platform for sharing ideas, acted as a communication tool and interactive medium while some respondents felt that it provided a problem-solving platform, informal and peer-based learning and source of information.

Generally, the respondents identified a range of benefits to the employees associated with social networking and below are the summary of the responses:

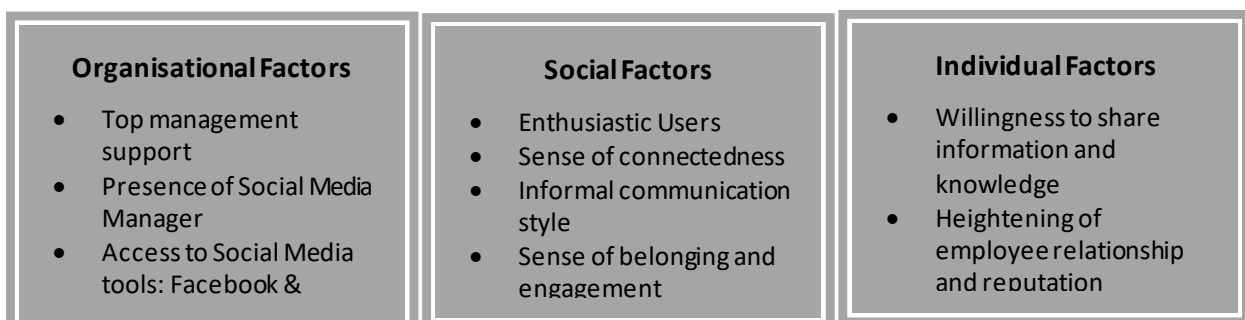
- Social networks allowed employees to enjoy the sense of connectedness because it enabled them to establish interpersonal relationship with other health professionals within the organisation (people they do not usually work with).
- Social networks empowered people to seek answers from their peers, strengthen connections between colleagues, transfer knowledge and encourages organisational awareness.
- Social networking between different health professional groups improved rapport, motivation, heightened employee engagement and reputation.
- Social networking provided a way for employees to communicate and share information with one another throughout the day.
- Social networks facilitated informal learning and skill development outside traditional formal education settings by supporting peer-to-peer learning of knowledge and skills and collaboration.

- Social networks provided a link between the executive and senior management and employees. Employees could, therefore, easily connect to the top management through the social platform.

This study indicated a new finding about the advantages of social network and the benefits it provided to the employees' at the workplace which helped them feel connected through interpersonal relationship, provided platform for peer-based and informal learning and sharing of information.

These respondents identified enabling factors which they perceived could influence employees to use social networks that revolutionised the way they communicated and collaborated. Figure 14 shows the perceived factors that may possibly motivate staff to use social networks in the organisation. This finding aligns with the findings of Chin *et al.*, (2015) who provided an in-depth understanding of success factors such as organisational, social and individual that encouraged employees' to use social networks in their work role. Their study also noted technological factors such as ease of use, integration with existing system; and accessibility that influenced the likely usage of social networks.

Figure 14: Perceived enabling factors that may impact the use social networks



(Developed for this study from responses to questions Q11 of the manager/executive interview protocol)

However, some of the interviewees remained sceptical about the use of social networks in the organisation. Despite the perceived advantages of social networking, these respondents identified a number of concerns which prevented social networks from being fully effective.

- The communication gap, that is, vertical (top management-to-employees) resulted in limited shared understanding, which in turn constrained the scope of social networks and the use of OBPM system. In other words, groups who were engaged in collaborative work or social groups' only worked productively when there was shared understanding of the desired outcomes, strategic objectives and goals, programs and processes.

- Lack of employee engagement in performance planning restricted shared understanding and communication with other co-workers.
- Fragmentation nature of the business that is, diverse groups with people from various backgrounds, with different experience and areas of expertise led to different understanding that affected the efficiency of collaboration process and social groups.
- Lack of common understanding influenced employees work performance and decreased organisational productivity. Employees wasted valuable time using social networking without successfully integrating shared understanding of how performance of different parts of the organisation linked together to deliver quality health outcomes amongst co-users of the social groups.
- Employees shared confidential information such as patients records through a social networking sites and that information was accessed by an unauthorised person, leading to a leak of that information and loss of organisational reputation.

Chin *et al.*, (2015) also identified barriers that had negative effect on the use of social networks as did Grills *et al.*, (2012). Some of these factors noted in these studies were poor communication; limited time; mistrust; lack of enforcement; geographical distance; lack of feedback from others; and lack of social network skills.

5.2.4 Shared Understanding

The study revealed lack of shared understanding in the organisation. Almost half of the respondents identified challenges associated with engaging diverse groups and embracing collaborative and shared understanding in the organisation. Barriers to reaching shared understanding in Case A included engaging the diverse workforce and aligning their behaviours and actions towards shared vision, key priorities and outcome-based performance. Case A's service culture focused on delivery of person-centred care, however not every business area understood this and shared the same goal every day. For instance, the Population Health division was focused on health promotion and prevention and they perceived that the delivery of person-centred care was not directly related to the work of their division. As a result, they felt disengaged, worked in isolation and did not display shared understanding of strategic priorities the organisation.

A senior executive said:

"The people think that this is what I work on and this is my direct role that is the patient in front of me (which is not very uncommon in the health care organisation). However, in order

to provide the best care to patients in front of you does require awareness of other parts of the organisation and the relationships to other parts of the organisation (A011)."

Collings and McMackin (2017) suggested that organisations with the greatest shared understanding of the vision, key priorities and aims of PMS are the ones with most effective PMS. They argued that shared understanding of the purpose of PMS among the key stakeholders and direct link to the organisational strategic priorities optimised the return on the investment in PMS and drove productivity and employees' performance in the organisations.

The current study revealed that a silo culture led to lack of communication and lack of shared understanding between divisions in this large and complex organisation resulting in the vision of the organisation becoming fragmented. This impacted the way the employees worked as they did not understand the roles and responsibilities of the others across the organisation. Mulder *et al.*, (2004) focused on importance of communication in creating the process of shared understanding as did Hinds and Mortensen, 2005. They noted that communication contributed to the healthy functioning of the geographically distributed teams by creating stronger shared identity and more shared context.

Lack of time was identified as one of the factors inhibiting shared understanding in Case A. This is consistent with the findings of Karagoz (2017) who identified that a lack of time was a barrier to knowledge sharing which impacted negatively on the shared understanding within the organisation.

Diverse groups, diverse and silo culture and isolated performance were also identified as the barriers in reaching shared understanding in Case A. This finding validates the study undertaken by Karagoz (2017) who recognised diverse culture as having negative impact on the creation of shared understanding. Karagoz (2017) highlighted that the silo organisation was where people from different departments often worked in isolation and frequently felt little need to share knowledge outside of their domain. This resulted in isolated performance, diversion of the flow of information, hoarded knowledge, diminished performance and further fragmentation between functions and business units.

Diverse culture was also identified as an inhibiting factor in a study undertaken by Vangen (2017). The author noted that distinct professional groups brought multiple cultures within the organisations which significantly influenced shared understanding causing conflicts and misunderstandings. Vangen (2017) highlighted that culturally diverse organisations required extra effort and care, particularly, time and resources to gain better understanding of and deal appropriately with cultural issues affecting communication and shared understanding. These

included formal information gathering, visits and networking, all aimed at enabling managers to learn about the cultural diversity and how to deal with the associated cultural issues.

This study revealed a new finding pertinent to lack of employee engagement in strategic planning which prevented the creation of shared understanding in Case A. This has resulted in: employees feeling disconnected; unclear about their roles and responsibilities in strategic planning process; and had limited understanding of the interplay between the planning process and the use of OBPM system. This important finding show disconnect in this space which stressed the need for improved communication from the executives to front line staff about the strategic priorities, goals and objectives of the organisation.

Table 26 demonstrates participants’ responses in relation to the barriers to effective shared understanding in the organisation.

Table 26: Responses related to lack of shared understanding

Issue	Supporting Comments
Limited shared understanding	<i>The social networks only works well when there is shared understanding of the key priorities and the outcomes. We tried to develop peer networks in Policy Branch and it failed because of limited corporate understanding of collaborative corporate sense of purpose, programs and processes (A008).</i>
	<i>The shared understanding through the organisation, that is, aligning organisation goals with individual goals and how they translate into performance framework is an area that we do need to improve on (A010).</i>
	<i>There is different understanding amongst diversity of groups in Case A. There are nurses vs doctors vs allied health officers vs administrative officers with different cultures and understanding between leaders and divisions. Due to the size and complexity of the organisation, leaders find it hard to integrate different groups and help them understand the part they play in the process and execution of organisational goals and strategies (A014).</i>
	<i>I think shared understanding does not permeate across the whole organisation. Due to lack of time there is communication gap and the focus is on short-term and isolated performance (A016).</i>
	<i>There are complexities associated with shared understanding – there are diversity of groups in the organisation differing with respect to size, culture and interactions and we need to speak their language to come to common understanding (A018).</i>
	<i>Through effective communication, executives can reinforce key priorities and the performance measures that matter and encourage people to take action to improve performance against them (A020).</i>

(Developed for this study from responses to questions Q11 of the manager/executive interview protocol)

5.2.5 Weak evaluative culture

The respondents were asked for their perception of the evaluative and learning culture demonstrated in Case A that supported the use of OBPM. The majority of the executives and senior managers felt that Case A had a weak evaluative culture as part of the overall organisational culture. Overall, the respondents did not see a supportive organisational culture that encouraged evaluation activities in the organisation. The lack of evaluation expertise and evaluation units undermined an evaluative culture in the organisation. The weak evaluative culture implied that the organisation did not provide a stronger basis for refining KPIs and selecting meaningful KPIs for setting strategic directions for the organisation. Despite the organisation's strong focus on performance improvement, quality standards and innovation, the respondents identified challenges associated with the process of evaluation. Ferguson (2003) and Hoole and Patterson (2008) described an evaluative culture as an organisational culture that was constantly seeking information on its performance to better manage and deliver programs and services. Their study emphasised that evaluation activities were integral part of the organisations and played critical role in the development of a learning culture.

The findings of the current study demonstrated that evaluation was not factored at an early stage in planning and budget process. There was no evaluation plan in place and was not aligned with strategic planning at the organisational level. While Ferguson (2003) posited that the annual business plan formally identified the projects and programs in which evaluation was undertaken and used in future. These projects mainly reflected organisation's business priorities. However, the study suggested proposed remedial actions and their associated costs arising from the evaluations were included in the organisation's operational budget. It was noted, though, that due to budget constraints, allocating scarce resources to evaluation activities reduced the resources allocated to the delivery of programs itself. Such a finding was also reported by Loud (2014) who stated that due to the limited resources evaluation activities were perceived as competing for scarce resources.

This study revealed the factors that contributed to weak evaluative culture in the organisation. First, the lack of evaluation expertise and evaluation units undermined an evaluative culture in the organisation. Structural factors such as the appointment of an internal evaluator and the location of evaluation within the executive area that contributed towards the uptake of evaluation activities were found to be necessary according to Ferguson (2003). Further to this, Hoole and Patterson (2008) found that two case organisations used evaluation expertise from outside professionals who became full members of the team, with a clear focus on building evaluation capacity. Similarly, Loud (2014) found that an internal evaluation services unit was established in Swiss federal administration

to manage all evaluation-related functions such as evaluation was used as a strategic tool, a learning tool, a source of knowledge and expertise and a tool ensuring transparency.

The current study showed that Case A was in early stages of embedding a culture of evaluation in the organisation (David, 2002; Barrados and Mayne, 2003; Britton, 2005). A number of authors had looked at the characteristics of an evaluative culture. Based on the review of the literature, table 27 lists the key characteristics of Case A with a weak evaluative culture (Mayne, 2010).

Table 27: Characteristics of weak evaluation culture

Stage	Elements					
Early or Beginning Stage	Culture	Capacity	Planning	Strategy	Implementation	Use
	Weak evaluative culture due to time constraints, low evaluation awareness, siloed culture, lack of self-reflection	Evaluation skills are limited	No Evaluation Plan in place-not aligned with strategic planning at the organisational level	High risks programs are prioritised	Ad hoc and infrequent evaluation activities	Only significant recommendations are implemented

(Developed for this study from responses to questions Q9 of the manager/executive interview protocol)

The case data indicated that while OBPM was an integral part in examining and improving performance in broader context, evaluation was perceived as an ad hoc exercise that was undertaken at certain stages and for certain purposes. The study showed that evaluation occurred for some policies and programs, mainly after implementation of the programs and policies, which assisted Case A to verify achievements, impacts, appropriateness and effectiveness of its policies and programs. This limited Case A's ability to assess if all of its health programs, initiatives and projects are delivering good outcomes, which in turn restricted its ability to build an organisation reputation for innovation and continuous improvements.

This study showed that the organisation did not have access to data to carry out evaluation activities. The finding revealed gaps from data entry to data analysis and reporting making it hard to use the data for evaluation purposes which in turn affected strategic planning process. This study also identified that the collection and limited use of performance data, mainly for reporting purposes. The study revealed that the organisation is stuck in a tactical approach with less focus on

outcome-oriented approach. Table 28 provides respondents' perception of weak evaluative culture displayed in Case A.

Table 28: Weak evaluative culture demonstrated in Case A

Issue	Supporting Comments
Weak evaluative culture	<i>I think we need far more in terms of implementing an evaluation culture and focus on strong self-examination- I think it is mainly due to time constraints. Lack of evaluation activities does not provide feedback to planning at strategic level (A008).</i>
	<i>I am not aware that we evaluate particularly well here. There is limited engagement in self-reflection due to time constraints and a lack of evaluation expertise. The weak evaluative culture also means that the performance indicators remain static (A009).</i>
	<i>I don't think that whole organisation demonstrate strong evaluative culture. I think our organisation gathers performance data but limit its use mainly to external reporting. I also think there is lack of internal expertise to undertake evaluation activities such as evaluation of KPIs (A010).</i>
	<i>This organisation's evaluative approach is still in its early stages i.e. we do not have time and expertise for evaluation. This results in limited feedback for strategic planning and evaluation of KPIs (A011).</i>
	<i>Case A needs to improve in this area – I think the use and collection of performance data is limited to meeting reporting requirements. Lack of evaluation activities does not contribute to strategic planning and even the performance indicators had not been reviewed periodically (A013).</i>
	<i>Case A is in its infancy in this regard – our organisation is stuck into tactical approach with less focus on outcome-oriented approach. The organisation acknowledges the need to learn but doesn't have time for evaluation. The evaluation component remains weak and as such the performance indicators are not evaluated periodically (A014).</i>
	<i>Lack of evidence-friendly information systems. At a very basic level, we do not have access to data so how can you use it to evaluate - there are gaps from data entry to data analysis and reporting thus it is very difficult to use the data for evaluation purposes which in turn affects strategic planning process (A015).</i>
	<i>I don't think that Case A demonstrates an evaluating culture but I think it is changing. I now see that we are sorting of evaluating our performance and learning from others whether it is our colleagues, or someone interstate or overseas but this still is at early stages (A016).</i>
	<i>Case A displays weak evaluative culture with limited feedback to strategic planning. There is lack of learning focussed evaluation and monitoring. However, it will be part of the cultural change. It is a long-term planning to improve the culture within Case A (A017).</i>
	<i>I would say that evaluation hasn't been as effective as it should have been in the past due to time constraints (A019).</i>
<i>I don't see strong culture of evaluation is embedded in Case A. Generally, there is not a lot of time for looking back because you are so busy (A020).</i>	

(Developed for this study from responses to questions Q9 of the manager/executive interview protocol)

Refinement of KPIs does not form part of evaluation cycle

Case A's OBPM system used a range of KPIs such as input, output, outcome indicators to assess performance and enhance organisational decision-making, improve performance and accountability. However, the findings suggested that the assessment and redevelopment of KPIs did not form part of the evaluation cycle of the OBPM framework of the organisation. This implied that the review and evaluation of KPIs was not a recurrent exercise taking into consideration changing strategic priorities of the organisation. The respondents felt that these KPIs had remained fairly static over time due to the weak evaluative culture displayed in the organisation. A senior executive felt that the KPIs had not been refined to align them with Case A's strategic planning. In addition, a senior manager felt that the organisation was only measuring KPIs that were easily collected, measured and used.

"The overall performance indicators have remained fairly static over time and while we have Case A's strategic plan and the two are not as aligned as they could be (A011)."

"Unfortunately, many of these measures have been carried over from the previous years. For example, NEAT and NEST targets are aligned with measures at the national level which is related to key initiatives around the national health reforms. The National Health reform process has finished now. However, those targets remain in the Central State Local targets (A012)."

"There are number of KPIs that were selected 8-10 years ago. These KPIs were introduced because we could measure them at that time. These KPIs are no longer relevant and they have not evolved (A014)."

"I think that some of the performance measures are too irrelevant for anyone and it is a great concern because it results in a disconnect between people doing day to day job and actually what we try to measure in those jobs. I don't see the link between them. Some of our current KPIS does not add value to performance improvement of the organisation, however these measures are not refined due to political interference. There hasn't been an appetite to fundamentally change our entire matrix (A016)."

This limited OBPM framework's ability to contribute towards the evaluating and updating the KPIs. KPIs only became useful when they were aligned to the corporate strategy and informed strategic decision-making. This study showed that KPIs were not linked to organisational strategy, resulting in Case A wasting time and resources collecting information that was not going to benefit the organisation. The study indicated that some of these KPIs were identified and designed ten years ago and never got questioned in terms of whether they remained relevant, linked to strategy or

continued to help the organisation answer critical questions regarding the changing priorities. Case A had not been reviewing and updating its KPIs whenever there was a change in strategy or corporate priorities and as a result the KPIs did not remain relevant and aligned to the new strategy.

Albeit, the respondents agreed that KPIs were vital part of OBPM in monitoring activities and quantifiable outputs, they felt that the organisational goals, objectives and KPIs was not comprehensive enough to monitor performance across all strategic priority areas such as population health. The organisation was not tracking the performance data necessary to measure the KPIs and completely fulfilled executives' decision support needs. The data suggested that the organisation was mainly focussing on efficiency indicators and that counting minor things in a very detailed way. It did not create a results management regime, which focused on planning for results, measuring results, evaluating results and reporting results. For example, the respondents felt that the output indicators such as a Four Hour NEAT target: 85% of patients must spend less than four hours in the ED from arrival to admission, transfer or discharge indicate an output-based planning and reporting, which in turn implied the lack of outcome planning, monitoring and reporting system in place.

A senior executive said:

“ I think we need to move beyond just counting very small minor things in a very detailed way and arguing about what the actual answer is to using that data properly for decision-making in the areas of clinical service and population health outcomes. There are things that we measure and we do not measure it well and there are things that we should be measuring and we do not measure them at all (A015).”

A senior manager said

“At the moment leaders are overly focussed on the NEAT targets to drive what they are doing but this is a very small area of health. For instance, there are about 50 different reports that discuss the same measure (A014).”

Almost one third of the respondents expressed concerns that KPIs did not report on whether Case A was meeting its business objectives:

“I don't think that performance measures report on whether the Case A is meeting its business objectives at top level (A012).”

“We are currently focussed on services and service-oriented reporting rather than outcomes. Even though Case A's business objective is person centric services, we still report on services.

There is a misalignment between our vision and statement and what is being achieved (A014)."

"I think there are deficiencies as most of the performance measures report on very proximal health service outcomes (A015)."

"I am not sure if we are collecting the right information on the PIP, e.g. PIP doesn't have right performance measures about the organisational business objectives related to workforce for the future, that is, it doesn't really say if you are working within budget or are over budget, or do you have right skill mix or do you have gaps that are hard to recruit. These sort of information that contributes to the business objectives such as having the workforce for the future are not reported and that the new strategic goals are not related to PIP information (A020)."

The study demonstrated that Case A was only measuring KPIs that were easy to collect, measure and use regardless of its relevance to the organisation. This implied a disconnect between whether KPIs could be measured and whether it should be measured. Case A was mainly focussing on efficiency indicators. It did not create OBPM or results management regime, which focused on planning for results, measuring results, evaluating results and reporting results. Case A focused on service-oriented reporting rather than outcomes and these KPIs mainly report on very proximal health service outcomes. This finding indicated that KPIs did not completely fulfil executives' decision support needs in terms of future planning, strategic directions and investment. This finding is in contrast to the findings of Goh (2012) who argued that strong evaluative culture supported effective evaluation and implementation of results management regime.

Disconnect between strategic planning and KPIs

The weak evaluative culture in Case A implied that the KPIs were not evaluated regularly which in turn limited Case A's ability to link strategic planning and KPIs. More than half of the respondents expressed concerns in relation to the misalignment between the strategic planning and KPIs. Table 29 shows respondents' perception about OBPM's limited contribution towards the strategic planning in the organisation.

Table 29: Misalignment between strategic planning and OBPM

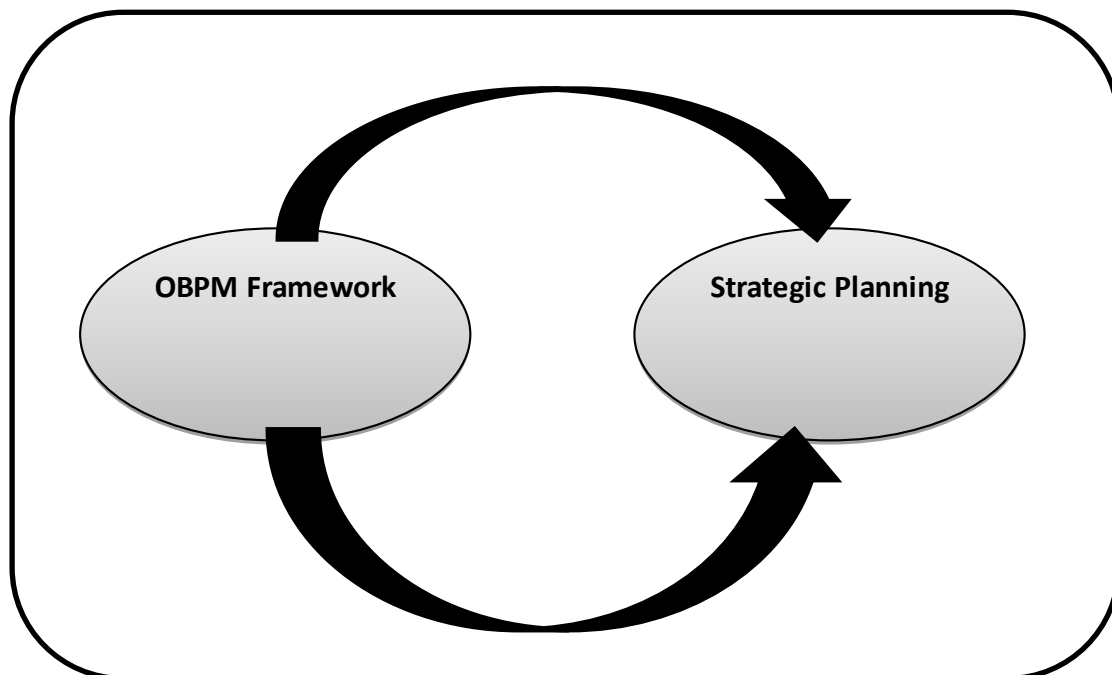
Issue	Supporting Comments
Misalignment between strategic planning and OBPM	<i>I think that KPIs and strategic planning is not linked enough. We as executive group do not have opportunity to look at the performance data and determine as a group what our priority should be for hospital into our future (A009).</i>
	<i>There are lot of measuring of things, however there is inconsistency in relation to how the performance measures are used at organisational level (A010).</i>
	<i>The clear strategic plan which links to performance measures is sort of undeveloped. The overall performance expectations have remained fairly static over time and does not align with the overarching strategies (A011).</i>
	<i>There are disconnects between Case A's strategic planning and performance measures. Case A adopts more tactical rather than strategic approach i.e. they are more interested in tactical solutions to these problems. Often there is misalignment between what the goals of the organisation are and where the money is spent and where resources are planned (A014).</i>
	<i>I don't see the strategic plan and OBPM are clearly aligned, that is, there are issues around strategic plan and OBPM which measures performance against the strategic plan which then assist with the refinement of strategies (A015).</i>
	<i>I can't see the correlation between KPIs and Case A's strategic planning. People do not look at the performance measures such as outcome measures and say this is where we need to improve, change or invest. For example, I attended a meeting with the Minister for Health this morning regarding Case A's budget bid for next 4 years, I do not see evidence people taking performance management framework and performance matrix and using that to determine future investment, future planning and future strategic directions (A016).</i>
	<i>Performance Information Portal (PIP) Data has been in in place for a long time and I am not sure if it aligns to what we now need to achieve as organisation as a whole and there may a need to review it (A020).</i>

(Developed for this study from responses to questions Q3 of the manager/executive interview protocol)

The data suggested that OBPM was an integral part of strategic planning, that is, to utilise strategic planning successfully, it was important first to measure how the organisation was performing currently. Thus, the respondents proposed an integration of strategic planning and OPBM framework to support an outcome focussed regime and to evolve and improve the strategic planning process in the organisation. Figure 15 shows connection between strategic planning and OBPM. The connection strengthened both processes, that is, OBPM offered highlights on Case A's

performance in terms of meeting established performance benchmarks, allowing meaningful comparisons of actual performance to targets, necessary to develop and sustain an effective strategic plan through the budget process. The data suggested the use of performance measures throughout the strategic planning process to evaluate alternative strategies and select the one which is result-based and contributed towards the immediate and long-term outcomes of the organisation.

Figure 15: *Integration of strategic planning and OBPM framework*



(Developed for this study from responses to questions Q3 of the manager/executive interview protocol)

The respondents felt that there was inappropriate balance between the outcome and output KPIs within the OBPM framework and the suite of KPIs had not been reviewed on regular interval due to the weak culture of evaluation. The KPIs related to the desired outcomes was kept to a minimum resulting in limited outcome data being generated and reported. There was a limited use of outcome information to learn from past experience and to inform decision-making on the design and delivery of health programs. The data suggested the use of outcome measures that indicated the effectiveness of Case A's planning and evaluated that health programs are delivering the desired outcomes.

A lack of focus on organisational learning

The research explored the learning culture demonstrated in the organisation and its impact on the use of OBPM. Since the interviewees were officers with senior positions working within the organisations, they were in a position to reflect upon learning within the organisation as a whole.

The respondents noted that the organisation had to demonstrate that it is learning in accordance with the Central State Public services, and in turn, support the use of OBPM. The findings suggested a focus on individual learning where individual staff were actively engaged in learning. This was mainly done through the staff development unit (SDU), which offered learning and development opportunities for all staff. The learning and development opportunities formed part of the Individual Performance Plans (IPPs) with their supervisor/manager, which continually allowed the staff to increase their capacity.

The respondents identified a broad range of activities to develop workplace capabilities including formal education undertaken in the tertiary sector, informal learning from work and life experience and self-directed learning. The organisation developed the following frameworks to create a learning focus which integrated learning objectives to support business strategies and staff development:

- Learning and Development Framework
- Essential Education
- Developing leaders and building team framework
- Change Management Guide – how to effectively lead a team through change

The respondents felt that although learning took place throughout the organisation at different speeds and levels, the collective learning of individuals could impact upon the organisation as whole. However, they also noted that individual learning was not be as effective as it should be due to the siloed culture which currently existed in the organisation. The siloed culture implied that no one was interested or wanted to know what the others across organisation was doing or have learnt. The siloed culture undermined organisational learning and learning from experience of its staff.

The data suggested that the individual learning was happening at individual and team level and not necessarily within the wider organisation, which in turns limited the potential for organisational learning. A senior executive said:

“Individual learning plans needs to be aligned with organisational goals to ensure that we are encouraging organisational learning and getting best value out of the learning opportunities provided to staff (A011).”

The respondents reported on some of the barriers that constrained effective learning process in the organisation including the difficulty of maintaining a learning culture at a time of rapid transformation that took many forms. The results suggested that the successive waves of reform had significantly affected the culture of learning due to the continuous changes in the strategic directions

and the reporting lines. Goh (2012) placed emphasis on building a strong learning capacity such as encouraging knowledge sharing, learning through experience, making time for learning. His findings found that the successful implementation of a PMS supported the constructive use of performance information to achieve learning and improvement in programs. Goh (2012) pointed out that performance information contained in the performance measures was used as an effective tool for learning and evidence-based decision-making in the public sector organisations. Similarly, Hoole and Patterson (2008) focused on the development of a learning culture within the organisations including resourceful problem solving amongst the staff; recognition of learning focussed approach; and creative ways to understand community impact.

The data identified feelings of fear, anxieties and blame as -factors that inhibited learning process at the organisational level. The feelings of fear and blame led to little scope for self-reflection, communication or learning. The respondents felt that the people within the organisation were fearful of releasing information about bad performance and thus looked for someone else to blame to hide their own under performance. For example, there was a culture of hiding under performance and alternatively finding someone else's under performance and promoting it to the bosses in order for them to ignore your own under performance. Goh (2009) noted this fundamental and challenging obstacle to PMS which included the traditional norms operating in public bureaucracies such as suppressing negative data and staying out of trouble.

A senior executive said:

“Historically, people were fearful of expressing new ideas and concept as they felt that their ideas were not valued, that is, they could not speak if things didn't fit for them (A010).”

A senior manager said:

“There are different groups who are responsible for NEAT and as there is unclear responsibility, nobody is held to account. Because nobody is held to account NEAT measure is still below target. So people to hide underperformance and try to blame each other (A014).”

A senior executive said:

“There is a culture of hiding bad news, alternatively finding bad news about someone else and promoting it to your boss so that they ignore your under performance (A016).”

The respondents felt that the key constraint for many executives and managers was time as it was hard for them to find time for self-reflection, learning and improvements. The results suggested that self-reflection and self-examination was not strongly and widely practiced in the fast-paced work environment in Case A, mainly in the operational areas which did not allow critically reflective

practice. The weak evaluative culture also implied that the organisation did not encourage sharing of knowledge and information. The concept of learning focus recognised that learning should not occur in isolation but rather as part of a bigger picture and permeated throughout all facets of the organisation which should encourage information and knowledge sharing throughout various areas and levels of the organisation. However, the respondents felt that siloed culture created barriers to knowledge and information sharing and development of supportive communication structure within the organisation. In other words, within a silo culture no one was interested or wanted to know what the others across organisation are doing or have learnt. The siloed culture undermined organisational learning and learning from experience of its staff. The weak evaluative culture did not value and encouraged sharing of information and knowledge, such as providing group learning opportunities and developing supportive information sharing and communication structures.

5.3 Conclusion

In RQ 2 the effects of the organisational culture on the use of OBPM in the case organisation was considered. The results indicated three organisational cultural factors that could impact on the use of OBPM. Performance culture as part of the overall organisational culture was seen as a key success factor contributing to the use of OBPM system in the case organisation. However, silo culture was considered to be creating barriers for the use of OBPM since all parts of the case organisation were not focussed on the same corporate goals and objectives resulting in misalignment between individual goals and organisational goals. The results also indicated employees did not understand how their work when combined with those of other business units would better achieve organisational goals and objectives. The results identified challenges in engaging the diverse workforce and aligning their behaviours and actions towards shared vision, key priorities and outcome-based performance.

Additionally, the findings identified other cultural factors such as social networks that contributed to the use of OBPM system in the case organisation. The findings indicated that the organisational goals, objectives and vision was not effectively communicated and poorly understood by the employees. The culture of effective communication was seen as key area that needed improvement. Lack of financial incentives, lack of shared understanding, weak evaluative culture and lack of focus on organisational learning were identified as factors that had negative effect on the use of OBPM system in Case A.

Chapter 6 Findings, Results and Discussions

RQ 3: How does the leadership and management commitment shape the use of OBPM in Case A?

The previous chapter presented case data finding and results related to the second research question: *How does the organisational culture affects the use of OBPM in Case A*. The objective of this chapter is to present the case data findings and discuss results in relation to the third research question which examined the impact of leadership and management commitment on the use of OBPM in the case organisation.

6.1 Impact of leadership and management commitment on the use of OBPM

This section analysed the data collected with respect to the third research question which examined the impact of leadership and management commitment on the use of OBPM.

Research Question 3: How does the leadership and management commitment shape the use of OBPM in Case A?

The respondents were asked for their perception of the impact of leadership and management commitment on the use of OBPM in Case A. The impact of leadership and top management support and commitment on the use and implementation of PMS had been discussed in a number of studies (Hennessey 1998; Bourne *et al.*, 2002; Pollanen 2005; Sanger 2008; Sole 2009; and Akbar *et al.*, 2012). The results of this study also confirmed political leaders, executive leaders and management commitment are as - key internal factors that influenced the use of OBPM in Case A. The findings identified two major themes including:

- The importance of leadership
- Political leadership

The following sections discuss in more detail the impact of leadership and management commitment on the use of OBPM.

6.1.1 The importance of leadership

The theme of importance of leadership was identified by all of the respondents. Based on the data it was evident that the use of OBPM was largely depended on the executive leaders and top managements' commitment and involvement. The analysis suggested that good leadership was

instrumental in making OBPM effective in the organisation. The response regarding this theme is shown in Table 30.

Table 30: The importance of leadership

Theme	Supporting Comments
The importance of leadership	<i>Good leadership is absolutely vital in making OBPM effective in Case A – our leaders promote positive performance culture (A008).</i>
	<i>I think it is really important in term of leading from the top demonstrating strategic perspective and high level of support and commitment to OBPM (A009).</i>
	<i>I think good leadership is extraordinarily important in making the OPBPM effective in the organisation. Without good leadership, we can't promote performance culture and facilitate effective use of OBPM (A010).</i>
	<i>Good leadership is crucial in making the OBPM effective in the organisation through support for performance culture, high level of accountability and transparency (A011).</i>
	<i>I think good leadership is very important in facilitating effective use of OBPM – they encourage performance culture via innovative best practice (A012).</i>
	<i>Good leadership is instrumental in making OBPM effective – they are ambassadors of positive performance culture and innovation (A013).</i>
	<i>Good leadership is extremely important in making OBPM effective in Case A. This is where the shared vision and shared goals needs to happen (A014).</i>
	<i>I think good leadership is absolutely crucial in making the OPBPM effective in Case A through establishing performance culture. There is a leadership at the top i.e. there is a top to bottom approach where you have to bring the process down to the very base level of the organisation and it also needs to come from bottom up (A015).</i>
	<i>I think good leadership is very important in making the OBPM effective in Case A, that is, until every leader or manager buys into it – it is worthless (A016).</i>
	<i>Good leadership is very important in making OBPM effective in the organisation. They establish performance culture and develop strategic goals and objectives which is cascaded down the line (A017).</i>
	<i>I think leadership is very important in making OBPM effective in the organisation. I think leaders need to be accountable for outcomes and also need to communicate that sense of commitment to their staff (A018).</i>
	<i>Good Leadership is instrument in making the OBPM system effective in Case A. Effective leadership is everything at the end of the day (A019).</i>
	<i>From the leadership, it says that this is the direction we are going, this is what performance looks like, this is what measurement is and without that people won't know what performance is and they will create their own version of good performance is. Leadership is crucial in creating consistency about what good performance is (A020).</i>

(Developed for this study from responses to questions Q12 of the manager/executive interview protocol)

The respondents identified the elements of leadership which made OBPM useful in the organisation. These elements are illustrated in Table 31 below. This finding is consistent with the past research findings of Hennessey (1998); Bourne *et al.*, (2002); Pollanen (2005); Sanger (2008); Sole (2009); and Akbar *et al.*, (2012) who claimed that leadership and management commitment played a crucial role in establishing and retaining a stable PMS.

Table 31: Elements of leadership that makes OBPM effective

-
1. Strategic Perspective
 2. Performance management culture
 3. Support for OBPM
 4. Result-focused (outputs)
 5. Accountability and transparency
 6. Rewards

(Developed for this study from responses to questions Q12 of the manager/executive interview protocol)

The case data suggested that the Case A leaders demonstrated a strategic perspective and clearly articulated strategic framework of vision, values, strategic goals and KPIS through formal performance planning. The respondents indicated that planning was a necessary element of the leadership. The leaders guided the organisation and showed the way towards the accomplishment of organisation goals and objectives. The respondents felt that planning was generally divided into:

1. Corporate, a long-term plan, which identified the vision, goals and objectives. This was mainly done at the executive level. The leaders ensured that the strategic goals and objectives were aligned with the vision of the organisation.
2. Tactical, a short-term plan and actions to move the organisation to the strategic goals, predominantly emphasising the current operations of various parts of the organisation.

The respondents felt that the leadership not only resided only at the top of the organisation but also emerged from, and cascaded down to, those in front-line roles. The leaders ensured that the operational decisions were linked directly to the strategic intent. The findings indicated that the leaders of Case A were the strongest advocates of the performance management culture in the organisation, that is, leadership was one of the key determinants of performance culture in the organisation. The leaders in performance culture were clear about the strategic intent and promoted a consistent performance-focused approach.

The findings suggested that the leaders promoted innovative best practices in the organisation. In line with one of the strategic objectives outlined in Case A Corporate Plan, the leaders supported

innovation across the health system to maximise health outcomes for the Central State community. The leaders promoted close collaboration with academic institutions, undertook quality clinical and non-clinical research and translated into practice and harnessed available data science. The data suggested that Case A leaders were supportive of the system, which also led to an effective use of OBPM in the organisation. More than three quarter of the respondents indicated that the leaders were supportive of OBPM system. Table 32 shows responses in this regard.

Table 32: Central State Health leaders being supportive of OBPM system

Theme	Supporting Comments
Central State Health leaders being supportive of OBPM	<i>Central State Health leaders are supportive of OBPM system (A008).</i>
	<i>Most of the leaders in Central State Health are supportive of OBPM system. To implement an amended OBPM system that aligns to a change agenda requires very strong leadership and very clear communication and support coming from leaders in order to do it (A011).</i>
	<i>Central State Health leaders are supportive of OBPM system (A013).</i>
	<i>The leaders of Central State Health are supportive of OBPM system in some ways (A014).</i>
	<i>I am sure that the leaders of the Central State Health are supportive of the OBPM system (A015).</i>
	<i>Yes, I think that the leaders of Central State Health are supportive of the OBPM system (A016).</i>
	<i>I think some leaders are supportive of the OBPM system (A017).</i>
	<i>I believe that leaders of Central State Health are supportive of the OBPM system (A018).</i>
	<i>Yes, the leaders of Central State Health are supportive of the OBPM system (A019).</i>
	<i>Generally, leaders are supportive of the OBPM system (A020).</i>

(Developed for this study from responses to questions Q13 of the manager/executive interview protocol)

The results suggested that the leaders were supportive of the OBPM system because it enabled them to make better strategic and tactical decisions, which in turn supported the wide range of medical and healthcare functions. More than half of the respondents felt that the OBPM system generated performance information that assisted the leaders in decision-making. Table 33 illustrates responses in relation to OBPM’s contribution towards management and executive decision-making.

Table 33: OBPM’s contribution towards management and executive decision-making

Theme	Supporting Comments
OBPM contributes towards management and executive decision-making	<i>Through performance reporting, we provide performance information including outputs stipulated in the contracts and SFAs with NGOs, which assists executives to make decision on health (A008).</i>
	<i>Within our division, we use performance information to guide our business planning, strategic planning, structure and decision-making about the allocation of resources (A010).</i>
	<i>OBPM enable us to assess different dimensions of what is required in particular decisions and weighing the pros and cons of the right decision (A011).</i>
	<i>On a daily basis, yes the performance information does contribute towards management and executive decision-making (A014).</i>
	<i>The decision-making that relates to how many procedures we are going to perform, activity levels, actions to address waiting lists, ED performance is directly linked to OBPM (A015).</i>
	<i>Executive decision-making is aligned with performance information – executive can’t make decision without understanding what the organisation’s performance is, what’s its expectations are, what’s its drivers are in relation to its demand for service delivery (A017).</i>
	<i>I think Case A is very data driven organisation, so OBPM surely contributes towards the Minister’s, executives and management decision-making (A018).</i>

(Developed for this study from responses to questions Q5 of the manager/executive interview protocol)

However, in contrast, there was also evidence that there was a lack of availability of performance data which weakened executives’ ability to make informed decisions. The executives reported:

“Scorecard discussions happens at divisional level. I have certainly never been to any scorecard meetings or discussions – they are very high level. There is very little formal reporting that comes through, I do not have good evidence to show how well do we comply with the industrial agreements in terms of recruiting and rostering junior doctors and how efficiently we use our workforce to provide the services (A009).”

“OBPM does not provide outcome data. We use public value scorecard, which is really useful because we are able to come up with some matrix for measuring or designing interventions and things like that which are of public value and socially driven (A010).”

“I don’t see evidence that every single decision made by executives is informed by matrix and performance data (A012).”

“There is lot of performance information that goes out there and people are able to see information i.e. operationally and accountability, they do not have sophistication to be able to understand all of these information (A014).”

“I don’t think that OBPM contributes to executive decision-making as I don’t get any performance information in a timely fashion to be an effective manager in this organisation. Case A spends very little on whether we can measure the well-being component of our Minister’s portfolio. The performance information that is currently being reported is of very little value to the strategic planning and executive decision-making. Some of the data that is being collected is analysed in siloed ways and the major motivation has been the expenditure (A015).”

The findings indicated that the result focussed element of leadership facilitated effective use of OBPM in Case A. More than two third of the respondents indicated that the leaders were results focused. Table 34 shows respondents’ perception of result-focused leadership. The respondents felt that the leaders focussed on output measures as key results. This contributed to a sense of accountability around the goals that had been set. The leaders designed and took accountability for managing the high quality health care service-oriented culture, efficient business processes and structures. The respondents felt that the leaders ensured accountability with defined levels of performance expectations which in turn, instilled transparency and provided confidence to internal and external stakeholders. Regarding the element of reward, almost one third of the respondents indicated that Case A recognised and awarded employees’ for their outstanding performance through non-financial rewards.

Table 34: Results focussed leadership

Theme	Supporting Comments
Results-focussed leadership	<i>I think leaders focus on results, mainly on achievement of outputs (A010).</i>
	<i>I think the leaders do focus on outputs results and encourage learning to achieve higher performance results (A011).</i>
	<i>I think the leaders do focus on results, efficiency and achievement of outputs (A013).</i>
	<i>Leaders focus on results in some way (A014).</i>
	<i>Yes, leaders generally focus on results (A016).</i>
	<i>Leaders do focus on results, particularly on achievement of outputs (A017).</i>
	<i>We do focus on the outputs result and we try to encourage learning and improvements (A018).</i>
	<i>We are a result-oriented agency of the Central State Government, focusing on output-based model (A019).</i>
	<i>I think leaders focus on results through strategic, accountability and operational indicators (A020).</i>

(Developed for this study from responses to questions Q14 of the manager/executive interview protocol)

On the other hand, the respondents remained sceptical about the commitment level of management that enabled effective use of OBPM in Case A. The respondents felt that the

commitment level of management towards the use of OBPM in Case A was low. Tung *et al.*, (2011) found that management support was a critical success factor for PMS implementation and highlighted the importance of the continued involvement and support from management. Their study found that management was encouraged to commit to the PMS and ensured that enough time and resources were dedicated on an on-going basis to properly develop and manage the existing PMS. The findings of this study indicated that managers face some formidable barriers that led to the low level of commitment of management towards the use of OBPM and it is illustrated in table 35 below.

Table 35: Barriers that leads to low level of commitment of managers towards the use of OBPM

• Performance reporting is output based	• Performance reporting is not outcome-oriented
• OBPM is perceived as nice but not essential	• The concept is that we are just too busy to focus on it right now
• Limited understanding of the complexities associated with OBPM system	• Lack of relevance in the number of performance indicators
• Poor performance becomes overwhelming for managers leading to ' <i>fear and deflect blame for yourself</i> ' attitude	• Making poor performance data look better in scorecard reports
• Limited understanding of the benefits and criticality of OBPM	• Inconsistent use of the systems across the organisation

(Developed for this study from responses to questions Q12 of the manager/executive interview protocol)

The findings also indicated that Case A lacked leadership core competencies, that is, drive for results and outcome-focused approach. The respondents felt that they needed leaders who could: set an outcome focused approach; establish clear responsibilities and processes for monitoring and measuring results, effectively communicate the results that the organisation is trying to accomplish and the progress, support collaboration; and encourage concerted efforts to achieve the unified results and outcomes. This undermined the effectiveness of the organisation and its ability to focus on the end results. Table 36 illustrates respondents' perception of limited leadership competencies. Cavalluzzo and Ittner (2004) found that top management commitment to performance management efforts, including a focus on resources, goals and strategies had a significant positive influence on the use of PMS.

Table 36: Respondents' perception of limited leadership competencies

Issue	Supporting Comments
Limited leadership competencies	<i>We need leaders who could focus on end results, aim to lead, educate, instruct, inform, and provide good and timely advice. There needs to be a concerted effort which provides clear responsibilities, provide processes that staff can follow and educate staff the way they can follow them (A008).</i>
	<i>I don't think that result focused approach is really embedded in the organisation. Some units are better than others on focusing on results and outcomes. I think the leaders should lead by example, provide necessary resources for the accomplishment of organisational goals and should clearly communicate across the organisation the impacts of the health programs and activities (A009).</i>
	<i>The broad strategic priorities and performance measures at the Directorate level are not attached to outcomes and they have not been well communicated and I suspect very poorly understood by most of the workforce (A010).</i>
	<i>I think when things get busy or focusing on daily operational issues and working on some of the longer-term objectives is something as leaders across Case A is yet to reach that mitigates achieving some of the results that we put (A011).</i>
	<i>I think Case A leaders focus on results, but it is limited to outputs and there is unclear roles, responsibilities and processes (A014).</i>
	<i>I don't think that we are measuring the right outcomes much at all and the results under the previous regime were all about the money and very specific results related to performance. Case A is spending very little on measuring the long-term outcomes of care and long-term outcomes of healthy and happy population. I think we need to identify our outcomes and that will determine what we measure. Currently, what we are measuring back here is trivial and may not be important and is disconnected from the wider outcome level. For example, the efficiency measures pertinent to emergency department does not reflect the wider picture (A015).</i>
	<i>I don't think that the results that Case A measures are right outcome indicators (A016).</i>
	<i>The leaders do focus on trying to get improved results and sometimes they may be forced to focus on results which may not be in the best interest of the whole organisation (A017).</i>
	<i>I think there is too much focus on day to day operational business needs and not much planning to achieve the best outcome (A020).</i>

(Developed for this study from responses to questions Q14 of the manager/executive interview protocol)

6.1.2 Political leadership

Public sector performance management has been described as element influenced by political factors (Hawke, 2012). The political factor exerted coercive pressures on use of OBPM under the realm of institutional theory. This included the influence of politicians in power, as well as the political influence from opposition. This study showed that the key driver for use of OBPM

framework in Case A was the strong support from political leaders and from the major political parties. Table 37 shows responses related to influence on the use of OBPM from political factor. Jalaludin and Nabhia (2018) found that the PMSs were influenced by the requirements of politicians such as the need for better accountability and service quality. These politicians were found to influence resource allocation, program reporting, monitoring and evaluation.

The findings indicated the political support seems to be particularly important for OBPM in Case A. The theme of political influence was identified by more than half of the respondents. The data suggested that the key driver for use of OBPM framework in Case A was the strong political support from the major political parties aimed at making Central State Government more accountable and transparent. Therefore, the long tenure of OBPM system in Case A was the result of continuous support and involvement of politicians. Central State Government promoted a culture of performance management in order to make Case A more performance-oriented and accountable for results. With an emphasis on performance, the politicians supported the collection, use and dissemination of performance data definition and execution of outcomes, outputs, strategic objectives and KPIs, budgeting for results, monitoring and reporting. This had been brought about by a combination of legislation and reforms aimed at making Central State Government more accountable and transparent.

Since the OBPM process held Central Government accountable and considering that public accountability is fundamentally a political process, the political leaders have showed continued commitment to openness, transparency and accountability using OBPM. The respondents indicated that the task of setting KPIs started with the identification of high-level outcomes, which was influenced by the political leaders. Case A then identified outputs that were linked with the high-level outcomes identified by the politicians. From the outcomes and outputs, Case A derived KPIs in consultation with the line Ministers.

With strong support from political leaders, the respondents were optimistic about future of OBPM, particularly in obtaining the resource for the use and refinements of OBPM. The political support had resulted in frequent refinements of OBPM framework. Hawke (2012) noted that Australia's public sector PMS had been defined by strong political factor. Hawke (2012) defined political factor as the influence of political leaders in power as well those who wish to exert political influence in opposition.

The political leaders' recent initiative, Case A System-wide Data Review, would enable the organisation to refine its OBPM system that would ensure that Case A runs an informed hospital and health care system that is accountable, transparent and responsive. The Central State Government

agreed to all findings and nine key recommendations from the review and was now implementing the required changes. The finding indicated that setting KPIs with goals and objectives did not solely rely on Case A executives and officials but required contribution from other key players including the political leaders in the Central State. Targets and indicators held Central State Governments accountable and public accountability were fundamentally political process and thus the line Ministers' got involved in the selection of outcomes, outputs, targets and indicators. The KPIs were used to inform Case A budgets resulting in both line ministers and central budget officials closely involved and agree on what will be measured and how.

It is widely believed that under the leadership of the new Director General, the future of the OBPM framework looked promising. The new Director General created the Commissioning and Performance Unit, which was be responsible for developing and administering KPIs, targets and systems to support these and monitor the performance of all funded health services. Sole (2009) reported that the effective introduction of PMS required a committed leader with considerable skills, who was willing to provide significant managerial investment and rewards. Sole (2009) asserted that leadership was critical in designing and deploying effective performance measurement and management systems. Sole (2009) identified that clear and visible involvement by senior executives and managers was a critical factor for successful PMS. In particular, Sole's (2009) study highlighted that leaders enforced formality to the performance management reviews and as a consequence influenced employees' commitment to achieving targets and improving performance.

Table 37: Responses related to political influence

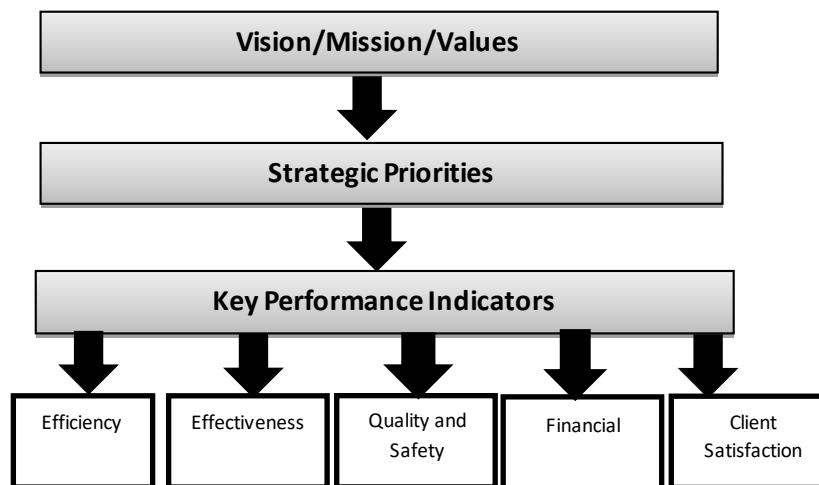
Theme	Supporting Comments
Political Influence	<i>The outcomes, strategic goals, outputs and targets are derived from political sphere (A010).</i>
	<i>The political leaders drive the selection of the performance measures. The Minister determines the requirements for strategic and accountability indicators and these measures define outcomes (A011).</i>
	<i>There are various factors including politics interfering very quickly which influence the outputs and selection of KPIs and targets (A012).</i>
	<i>The political leaders are instrumental since we have political announcements for more Walk-in-Centres – (A014).</i>
	<i>The broad outcome is decided through political imperatives, election commitments and so on. This outcome is about specific outputs, which is health care (A015).</i>
	<i>Political leaders have strong influence on some of the targets and KPIs (A016).</i>
	<i>I think the performance measures we have suits the political purpose whether it was for the Minister, the Opposition or Directorate (A017).</i>
	<i>We have a range of political factors that shapes our performance in terms of how we characterise what we do (A019).</i>

(Developed for this study from responses to questions Q13 of the manager/executive interview protocol

Development and use of KPIs

Generally, KPIs developed in the organisations reflected organisation's vision, mission and the strategic priorities. Baranova *et al.*, (2014) highlighted that an organisation selected accountability and operational KPIs which best reflected the vision, strategic goals and objectives of the organisation. Particularly, KPIs that the organisations develop reflected their visions and measured how effectively and efficiently the organisations delivered their services. Figure 16 illustrates how KPIs stems from vision, mission and strategic priorities.

Figure 16: KPIs transpires from vision, mission and strategic priorities



(Developed for this study from responses to questions Q13 of the manager/executive interview protocol)

The findings showed that Case A used strategic and accountability indicators to monitor its strategic objectives overtime to get an accurate picture of progress. Case A also used different KPIs to measure its operational objectives, that is, monitoring the internal operational delivery on a daily basis. Operational KPIs predominantly sought to assess the performance on an hourly, daily, weekly and monthly basis through real time performance measurement. This assisted the organisation to take corrective action quickly to address the pressing issues before it developed into a bigger problem. Case A also used benchmarking where the organisation performance was benchmarked against its peers. This provided a clear indication of Case A's competitors, as well as setting the organisation's own performance in the context of a well-defined peer group.

A number of stakeholders were interested in the use of KPIs including politicians. Subject to stronger coercive politician support, Case A collected and used the multi-dimensional performance measures for the efficient and effective management of the organisation. This helped improve efficiency, effectiveness and accountability in the organisation. Thus, KPIs aimed to boost performance of Case A in line with Central State Government's strategic objective to improve the quality of health services.

In essence, KPIs were used to:

- assess the performance of a health program or health intervention that informs subsequent program planning and implementation
- provide data and information to assess the achievement of goals and objectives against the target
- provide evidence to the Central State Government on how Case A has been performing over time and where improvement is needed
- enhance accountability to stakeholders by providing an objective and understandable picture of Case A's performance

The findings indicated that KPIs used by the internal and external stakeholders could be grouped under the following categories:

- Measuring economy – obtaining inputs of appropriate quality at least cost.
- Measuring efficiency – the relationship between outputs and the inputs used to produce the outputs.
- Measuring effectiveness – through use of proxy outcome indicators.
- Measuring service quality – the extent to which the service delivery meet requirements of National Safety and Quality Health Standards and three strategic priorities including person-centred, patient safety and effective care.
- Measuring financial performance – requirement to operate within budgets
- Client satisfaction survey – to assess whether Case A's clients are satisfied with the service delivery

Problems with KPIs

Despite the strong political support, fundamental weaknesses existed in the development and use of KPIs, that is, Case A continued to find it challenging to develop useful KPIs. Table 38 lists issues related to KPIs.

Table 38: Problems with KPIs

-
- Disconnect existed between high level strategic and accountability indicators and operational indicators
 - KPIs remained static over time and do not match with current strategic priorities
 - KPIs were irrelevant
 - Difficult to develop outcome measures
 - KPIs were not used properly
-

(Developed for this study from responses to questions Q13 of the manager/executive interview protocol)

The findings indicated that Case A was facing difficulties in aligning strategic and operational indicators. The respondents indicated that a disconnect existed between the metrics that the organisation uses at a strategic level and those indicators staff used at operational level on the shop floor to measure performance. The senior executives reported:

“I don’t see that our operational matrix feed into the high level strategic and accountability indicators. So for every single matrix we have should be able to trace down to the operational level matrix that makes the difference (A012).”

“I do not see that high level strategic and accountability indicators and the operational indicators that is articulated in the scorecards which are used by the senior managers to run the organisations are pushed out to the frontline employees (A016).”

The respondents indicated that some of KPIs chosen did not continue to be relevant since the strategies and objectives developed over time made it inappropriate to continue reporting on the same KPIs. A senior executive stated that KPIs remained fairly static overtime and did not match with current strategic priorities.

“Our current matrices are based on what we can measure rather than what our current strategic priorities are and it does not capture our current goals and objectives (A010).”

The findings indicated that Case A found it difficult to measure and report on outcomes of the health interventions which impacted the health outcomes of the Central State population. The senior executives and managers said *“Outcome is so difficult to measure from the performance point of view (A011).”*

6.2 Conclusion

In RQ 3, effects of the leadership and management commitment on the use of OBPM in the case organisation was considered. Leadership was seen as instrumental for effective use of OBPM in case organisation. The elements of leadership such as strategic perspective, innovation and best practice, supportive of the system, output results and rewards for strong performance were seen as factors supporting the use OBPM. The findings indicated the political support was considered to be particularly important for the use of OBPM in Case A. With an emphasis on performance, the politicians promoted a culture of performance in order to make Case A more performance-oriented and accountable for results.

Chapter 7: Conclusions

The previous three chapters presented the analysis of the data collected from the single case against the three identified research questions. This chapter presents a conclusion and demonstrates contribution to knowledge by interpreting the findings, presented in chapters four, five and six, within the context of prior research discussed in chapter two. Thus, the objective of this chapter is to consider the implications of the results to draw out the contributions that this study has made in answering the question. This study focusses on the following research question:

How do the internal factors (employee engagement, organisational culture leadership/management commitment,) shape the use of an OBPM in Case A?

The chapter begins with the discussion on the usefulness of OBPM, including issues identified (7.1), future of OBPM (7.2) and implications for theory is deliberated (7.3). Following this, practical implications for Case A are presented (7.4). The limitations of this research are discussed (7.5) and the implications for further research (section 7.6) are delineated. The chapter, and the study, conclude in section 7.7.

7.1 Usefulness of OBPM

This research concludes that the OBPM was perceived to be partially useful and effective in Case A. This study showed that OBPM provided a number of benefits to the organisation, management and employees including its ability to:

- define Central State Government's desired outcomes via identifying goals and desired outcomes for the government as a whole, creating the strategic and operational plans at organisational level and performance agreements between Case A and public hospitals
- set Case A's strategic objectives and outputs linked to Central State Government's goals and strategic outcomes, the services/programs that generated the desired outcomes, and the KPIs that are used to track and monitor the achievement of the desired outcomes
- ensure that Central State Government's health system is performing and facilitated monitoring of the organisation's health interventions and performance against strategic, accountability and operational targets
- track Case A's progress towards achieving health outcomes for the Central State community and the surrounding area. Case A used technology-enabled analysis and reporting capabilities such as reporting of real-time performance data
- ensure accountability for the provision of quality, efficient and best care to the patients

- provide a mechanism for ongoing performance improvement in the delivery of public healthcare to the community
- inform clinical decision-making about resources and activities such as the number of presentations, throughput and timeliness measures such as elective surgery
- fulfil reporting obligations which are set in legislation and signed by states and territories at the national level
- allow benchmarking with other similar hospitals, that is, Health Round Table data assist clinicians to achieve best practice by providing feedback to the clinical practitioners on their performance and how to improve the quality of service delivery and patient outcomes

This finding is consistent with what had been found in the previous findings of Buick *et al.*, (2015) and Blackman *et al.*, (2013) who posited a number of benefits of PMS, including provision of greater clarity regarding the desired outcomes, alignment and integration between high level strategies and organisational and individual goals and objectives, attainment of government organisational outcomes, supports high performance and ongoing performance improvements and collection and reporting of performance trends and targets to inform decision-making.

The partial usefulness and effectiveness of OBPM was indicative of some deficiencies in the OBPM process in Case A. While Case A made much progress, it still remained an organisation “in progress” and was undermined by a number of challenges such as OBPM was seen as a compliance exercise. This finding does not support the findings of Verbeeten and Spekle (2015) who focussed on accountability of managers, which encourages them to think in terms of results and to make them realize that mere compliance with rules and procedures is no longer sufficient.

7.2 Future of OBPM

The findings suggested that although OBPM is perceived as useful, there was considerable room for improvement. This finding is consistent with the findings of Del Wall (2010) who focussed on continuous improvement and innovation of PMS which results in monitoring of goal fulfillment, progress and reporting performance information needed to drive improvement.

It was concluded that Case A has started designing a new Data Repository system in line with the recommendations arising from a System-Wide Data Review that would support data reporting and management, which was integral to running an informed hospital and health care system that is accountable, transparent and responsive. The findings suggested that the new Data Repository

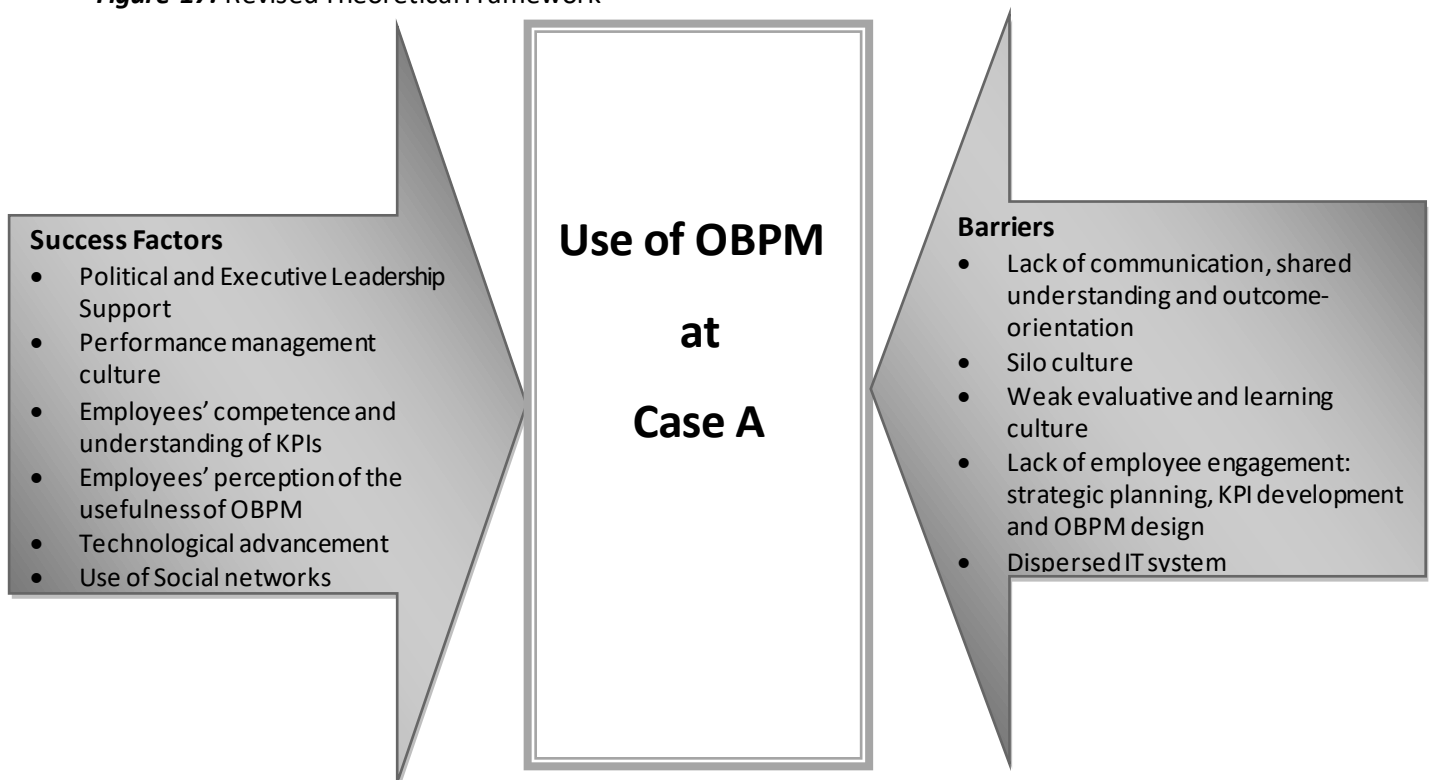
system would enable meaningful change that will benefit the patients and improve patient outcomes, clinicians, workforce, research, training, and administrators.

The data suggested that Case A's top priority was to meet the nine core recommendations from the Review. However, one of the immediate priorities for Case A was to identify and report relevant health information to improve access to useful and up-to-date data such as average ED waiting times, the number of patients actually waiting, and the number of patients receiving treatment through user friendly web portals that would help the community be more in control of their own health care.

7.3 Revised theoretical Framework

In making a contribution to theory, the original theoretical framework developed for this research (Chapter 2) was revised and presented. That is, this study has defined more specific factors that exerts influence on the use of OBPM in Case A. The revised theoretical framework, as presented in Figure 17 below, illustrate the key success factors and barriers to the use of OBPM in Case A.

Figure 17: Revised Theoretical Framework



(Developed for this study)

7.4 Implication for Theory

The current study broadened the understanding of the characteristics of OBPM system in Central State Government in Australia and the impact of three internal factors affecting the utilisation of the

OBPM system. The limitation of the previous studies which failed to empirically examine the impact of key success factors and inhibitors on the use of OBPM in a state government agency was addressed in this study. The current study contributed considerably to the PMS and institutional theory literature. The present study highlighted that institutional theory provided empirical validation to the comprehensive framework of factors that exerts influence on the usage of OBPM within its institutional context. In particular, the study highlighted the impact of coercive, mimetic and normative pressures on OBPM in its institutional environment. Accordingly, the empirical data in this study was analysed using the theoretical construct of institutional isomorphism within institutional theory.

This study contributed to the PMS literature by ascertaining if institutional mimicry occurred in Case A and its effect on the use of OBPM, especially when Case A went through successive waves of reforms and operated in a highly uncertain institutional environment. This study highlighted that mimetic pressures such as technological innovations exerted significant influence on the use of OBPM in Case A. For example, innovative OBPM technologies such as PIP, ED Live, Data Repository system and Digital Health Record enabled Case A to re-engineer the IT infrastructure of its traditional operating systems, requiring vast levels of investment. This study contributed to the PMS literature by suggesting that enhanced technology had a positive impact on the use of OBPM as it facilitated the collection, storage and reporting of performance information required by Case A. Technological advancements also led to cost savings, improved efficiencies and enabled effective implementation of customer-focused strategies.

This study contributed to the theory by demonstrating that the use of OBPM in Case A is coercively institutionalised through considerable influence and commitment from political leaders, senior executives', rules, regulation and legislation implemented by Central Government. A such these coercive forces exerted positive influence on the use of OBPM in Case A. Under normative isomorphism, this study revealed that performance management culture as part of overall organisational culture exerted positive impact on the use of OBPM. That is, a performance management culture facilitated the use of OBPM, which contribute towards strategy formulation, KPI development, budgeting, delivering of health programs, performance reporting and provision of rewards. However, other normative institutional factors such as a lack of communication, a silo culture, weak evaluative and learning culture, lack of shared understanding were identified to have negative influence on the use of OBPM. Nonetheless, the culture of social networks displayed positive impact on the use of OBPM.

Under normative isomorphism, this study contributed to the theory by demonstrating that the use of OBPM in Case A is positively influenced by employees' competence and their understanding of KPIs. This study contributed to the theory by presenting normative institutional inhibitors that exerted negative impact on the use of OBPM such as lack of employee engagement in strategy formulation, design of KPIs and design of OBPM system. This study showed that dispersed IT system also exerted negative influence on the use of OBPM in Case A.

Examining the institutional pressures through the lens of institutional theory highlighted that OBPM was largely shaped by the dominant institutional pressures of the environment within which Case A operated. Hence, this study offered a way of understanding OBPM within its institutional context. The notion of institutional isomorphism of institutional theory provided a theoretical lens and provided leaders and managers with an empirical insight into their institutional environment and how it influenced their OBPM. In particular, the findings provided the leaders and managers with an improved understanding of their OBPM, highlighting the importance of anticipating changes in their institutional environment due to the impact of coercive, mimetic and normative pressures on performance measurement practices, thereby assisting them in using their OBPM.

7.5 Implications for practice

The present study offered key implication for practitioners. First, the political leaders and managers need to understand that effective use of OBPM is largely dependent on their support and commitment towards it. Specifically, this study indicated that leaders need to provide adequate resources to support the use of OBPM in terms providing funding and infrastructure, training for staff, resources for refinements. This will in turn assists leaders to evaluate, measure and report on organisational performance, help make informed decision, help facilitate performance improvement, assist with strategic alignment, enhance accountability and transparency.

Second, this study indicated that the success or failure of OBPM relies on how well it is communicated to the employees. This study indicated to the leaders and management that proper communication throughout the design, implementation and use of OBPM needs to be in place to ensure buy-in and acceptance from major stakeholders. This may also create a positive momentum and will motivate employees. It was suggested that leaders could achieve this by having an internal communication strategy, staff forums, staff emails highlighting the beneficial effects of the use of OBPM in the organisation such as in ensuring clear accountabilities, efficiency and consistency in performance, improved organisational performance and thus improved utilisation of OBPM.

Third, the current study showed that OBPM is utilised in a silo culture which created lack of shared understanding of a unified vision. This study could help leaders of Case A to make better decisions to address the negative effect of silo culture on the use of OBPM. There is potential for the leaders to better integrate silos through tightening strategic alignment between organisational goals and objectives and individual performance objectives. The leaders could also promote the use of social networks to address the negative impact caused by a silo culture.

Fourth, the leaders and managers need to understand that a weak and evaluative culture exerts negative influence on the use of OBPM that does not allow regular review and update of KPIs. This results in a disconnect between strategic priorities and KPIs. This study could help leaders of Case A in setting the right KPIs that are relevant to the strategic priorities of the organisation and cascade strategic priorities and KPIs throughout the organisation to help employees' see how their work aligns with the strategic goals and KPIs. This study could help managers make better decisions related to the negative influence of lack of employee engagement on the use of OBPM in the organisation. As the overall contribution, the findings of this study indicated that Case A might benefit from actively engaging employees who are considered to have a better understanding of operational processes and operational metrics.

Fifth, leaders could engage employees in the design of OBPM, strategic planning and the design of KPIs. For instance, the leaders need to consider giving an opportunity to the employees at all levels to provide input into the strategic planning because the success of the strategy and KPI implementation rests on employees. After the formulation of strategies, the leaders of Case A need to hold briefing sessions to communicate the components of strategic plan to the employees and to keep the employees informed about the issues pertaining to the strategic plan. They could even consider distributing the documents to all employees in the organisation.

Finally, the leaders could also consider co-developing KPIs since that will enable the employees to see what it means to them personally and how they can contribute towards the achievement of these KPIs. Employee engagement in the development of KPIs is shown to be valuable, future research could consider aspects such as the training of employees for such participation efforts. This study suggested that managers across Case A need to increase the use non-monetary rewards to enhance job performance, which in turn, may exert positive impact on the use of OBPM in the organisation.

7.6 Limitations and Future Research

Firstly, the scope of this research was limited to the investigation of three internal factors only including leadership/management commitment, employee engagement and organisational culture. Future research may examine additional factors. Prior studies included in-depth discussion of the external factors and as such they have not been included as key factors in this study (Sole and Schiuma, 2010; Hawke, 2012; Akbar *et al.*, 2012). Another limitation was that the results were derived from single case study which limited the generalisability of this study's findings to different settings. However, this case study approach enabled the researcher to investigate real-life situations, issues and problems. As such it provided considerable insights to the views of managers in relation to the internal factors shaping the use of OBPM in Case A that could be applied elsewhere. The in-depth study of single organisation could not be obtained from other approaches such as survey or even a multiple case approach. An important strength of this study was the use of multiple sources which reduced the bias often associated with single case study.

The limitations can be assumed as the basis for carrying out further investigation of the factors influencing the use of OBPM. The proposed theoretical framework and its validation enriched the PMS literature by offering new insights that future researchers may expand with additional factors. Future research could be done in other countries or specific sector to obtain broader empirical evidence and better understanding of the factors influencing the use of OBPM. Lastly, to enhance the generalisability of findings, the study could be replicated to examine the factors exerting influence in the use of OBPM with larger samples.

7.7 Conclusion

This study examined the impact of internal factors, including employee engagement, organisational culture and leadership and management commitment, on the use of OBPM in Central State Government in Australia. Institutional theory was used in this study to ascertain the extent to which OBPM was influenced by the presence of coercive, mimetic and normative isomorphism phenomena. On the basis of current findings, it was concluded that political leaders and executive leaders were highly committed to the use OBPM. The political leaders and senior executives realised that the use of OBPM was vital to organisational success. Thus leadership support and commitment was identified as a positive factor in pushing forward the use of OBPM system. The real driver for use of OBPM was the support, legal mandate and requirements handed down by the Minister for Central State Government. The leaders' positive frame of mind towards the use of OBPM demonstrated that OBPM had a positive business impact on the organisation and thus sent strong signals to employees that OBPM matters. It was suggested that the use of OBPM in Case A was

coercively institutionalised through considerable influence and commitment from political leaders, rules, regulation and legislation implemented by the Central Government. It was suggested that the coercive factors such as political and legislative requirements had positive impact on the use of OBPM in Case A and this led to the achievement of the important organisational outcomes such as improved organisational performance, transparency and accountability for results.

It was also concluded that the leaders were instrumental in leveraging the culture of performance through investing resources to OBPM systems and processes. These elements were identified as factors that facilitated the use of OBPM. In Case A, the leaders focussed on promoting a performance management culture that made Case A performance-oriented and accountable for results. The efforts also focussed on frequent refinements of OBPM including development of the new Data Repository system for the collection, storage and reporting of activity-based performance data and activity-based cost data. However, this study suggested that OBPM was adversely affected by lack of commitment from middle managers. Some Case A managers were not convinced of the value of their OBPM as they experienced the problems such as lack of focus on outcome-orientation, lack of relevance in KPIs and OBPM is perceived nice but not essential. It was suggested that the normative factors such as performance management culture had positive impact on the use of OBPM while factors like weak outcome-oriented culture prevented managers to use the OBPM in Case A.

Employee engagement is often an overlooked but valuable step in the OBPM process. The study concluded that employee engagement demonstrated both positive and negative influence on the use of OBPM. Employees' exceptional technical know-how had positive impact on the use of OBPM in Case A. The employees' know-how and training emerged from organisation's professional thus it reflected the normative isomorphism. The programmers, system analysts and business analysts successfully used OBPM IT systems to retrieve and report performance data for various purposes such as for performance reporting, performance improvements and decision-making. This study showed that trainings trickle into organisational practices and this has a positive impact on the use of OBPM by ensuring that organisational performance remains high in the long term. Further, the cascading process enhanced employees' understanding of KPIs, which resulted in better assessment and reporting of performance. Under normative isomorphism, this had a positive impact on the use of OBPM in Case A.

The study showed that Case A faced challenges in engaging employees in strategic planning and design of KPIs and OBPM system. This suggested an adverse effect on the use of OBPM in Case A. To conclude, the results of the present study pointed to the need for the employee engagement in the

decision-making processes which may exert positive influence on OBPM such as development of strategic objectives, KPIs and OBPM system.

The employees perceived OBPM as highly useful in the organisation which made OBPM effective in defining clear vision, objectives and targets; ensuring that politicians and public managers accounted to the public on how taxpayers' money is spent; promoting greater transparency in the operation of the organisation; measuring the achievement of desired results; promoting performance improvements; enabling comprehensive reporting to stakeholders; and informing decisions made by the major stakeholders. In the use of OBPM, the study revealed several technical issues which hampered the use of OBPM. These include dispersed IT system and problems related to availability of data, missing and limited quality of data and integrity issues related to the unavailability of data dictionaries. However, Case A has made a fair amount of progress in implementing and using its new Data Repository system which has positive impact on the use of OBPM.

Under normative isomorphism, it is suggested that organisational members have developed shared values, beliefs and rules that have gained acceptance within the organisation and influence the use of OBPM. Organisational culture displayed both positive and negative effects on the use of OBPM in Case A. This study showed a positive effect of organisation culture on the use of OBPM. This included a culture of performance management that supported the use of OBPM in the aspect of planning, budgeting, resource allocation, delivery of programs, program reporting and monitoring. Case A's culture drove the use of OBPM system for performance improvements, internal efficiency, decision-making, transparency, accountability, monitoring and reporting of programs. Case A's culture also emphasised non-financial incentives for employees' which showed positive impact on the use of OBPM. The performance management culture showed the positive effects of normative isomorphism on the use of OBPM in Case A.

A silo culture displayed the effect of normative isomorphism on the use of OBPM in Case A. A silo culture suggested that the vision, strategic goals and objectives were not universally understood by the employees resulting in employees working in isolation, ignorance and demonstrating lack of shared understanding. This finding suggested that a silo culture had a negative effect on the use of OBPM. Nonetheless, a normative force such as social networks helped subside the negative effect of silo culture on the use of OBPM and developed shared understanding. Social networks create a culture of collaboration and provided an important source of information which in turn exerted positive impact on the use of OBPM. For instance, social networks encouraged organisational awareness among employees on both formal and informal matters and provided means of gaining

insights into what was happening at the workplace. Social networks allowed users to share ideas, activities and events through knowledge sharing practices within their individual networks.

The use of OBPM in Case A was adversely affected by normative isomorphism related to weak evaluative and learning culture in Case A. The weak evaluative culture existed due to time constraints and low evaluation awareness. This study identified limitations in terms of evaluation activities not being incorporated in the design of all of the programs and limitations in terms of engagement in self-reflection. The weak evaluative culture implied that the KPIs were not evaluated regularly resulting in the misalignment between strategic priorities and KPIs.

The study revealed feelings of fear, anxieties and blame as a factor that inhibited learning process at the organisational level. Employees' within the organisation were fearful of releasing information about bad performance and thus looked for someone else to blame to hide their own under performance. The study suggested lack of organisational learning due to the siloed culture which undermined organisational learning and learning from experience of its staff.

It is also suggested that the use of OBPM in Case A is encountering uncertain institutional environment and higher risks due to ongoing restructure. This suggested that OBPM is influenced by mimetic pressures to a greater extent resulting in the organisation emulating strategies, structures and systems of other successful organisations to avoid risks and secure legitimacy. This entailed adopting well sophisticated information systems and copying performance reporting strategies of its peers from other states, which in turn enabled them to benchmark their performance data.

Drawing from institutional theory, the present study examined the three internal factors influencing the use of OBPM and the findings are summarised below:

RQ 1: How does the employee engagement influence the use of OBPM in Case A?

It was concluded that sources of normative isomorphic pressures possibly came from employee engagement. Under normative isomorphism, employee engagement demonstrated both positive and negative influences on the use of OBPM. The use of OBPM in Case A was positively affected by normative factors such as employees' competence, their understanding of KPIs and their perception of the usefulness of OBPM. The lack of employee engagement in strategic planning, design of KPIs and OBPM system and dispersed IT system were identified to have negative influence on the use of OBPM.

RQ 2: How does the organisational culture affect the use of OBPM in Case A?

It was concluded that organisational culture demonstrated both positive and negative influences on the use of OBPM. The normative factors such as social networks and performance management culture had positive impact on the use of OBPM. The leaders' commitment and support were instrumental in promoting the performance management culture in Case A. On the other hand, a silo culture, weak evaluative and learning culture and a lack of shared understanding were key components that exerted negative effect on the use of OBPM.

It was concluded that technological advancements and innovative practices form the sources of mimetic isomorphism forces that shaped the use of OBPM in a positive manner. Case A had successfully absorbed innovation and information technology into the organisational culture. The adoption and use of information technology became central to performance reporting in Case A. The use of new technology such as PIP and ED Live focused on reporting real-time performance data, while the new Data Repository system and performance reporting tools such SQL and SSR helped with capturing, monitoring and reporting of performance information.

Case A upheld values, norms and culture that nurtured and promoted innovative best practices in the organisation. Case A's leaders supported innovation across the health system to maximise health outcomes for the Central State community through close collaboration with academic institutions that helped them undertake quality clinical and non-clinical research.

RQ 3: How does the leadership and management commitment shape the use of OBPM in Case A?

It was concluded that sources of coercive isomorphic pressures potentially came from political leaders and central government via enactment of laws and regulations that affected Case A that was considered to have positive impact on the use of OBPM. The strong political support, rules and regulations required Case A, to monitor and report on its performance to central government. This coercive pressure occurred due to Case A being heavily dependent on central government for its financial resources. The coercive isomorphic pressures exerted positive impact on the use of OBPM in Case A. These factors enabled Case A to design, implement, use and refine OBPM that assisted the organisation to monitor and report on its performance.

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Appendix A: Definitions

This section on key definitions elucidates the use of the foremost terms used, and how these terms will be interpreted for the purposes of this study. The terms include:

Public-sector organisations: provide various governmental services such as health care, education, community services.

New Public Management: introduced new management techniques to the public sector by transferring private sector practices and business philosophy in public management (Vigoda 2003).

Performance Management System: is a system-based approach that classifies performance indicators into input, process, outputs and outcome measures (Lacey et al's 2012).

Performance measurement: focuses on the metrics used to determine how an organisation is performing (Goh 2012).

Performance Indicators: are measures and targets which are linked to budget and resource allocation decisions and aims at encouraging better performance in public sector organisations (Kelman 2006).

Outcomes: are the results, consequences or impacts of government actions (Department of Finance and Deregulation (2009, p. 1) Outcomes form the basis for annual appropriations for budget for government agencies and for budget reporting in Australia (Hawke 2012).

Outputs: are countable units, and are the direct products of a program or an organisation's activities e.g. number of clients accessing services (Lacey et al's 2012).

Accountability: involves issuance of reports on activities and accomplishments and thereby enhancing transparency, public support, trust and confidence and legitimising existence of public sector organisations (Jaaskelainen 2010).

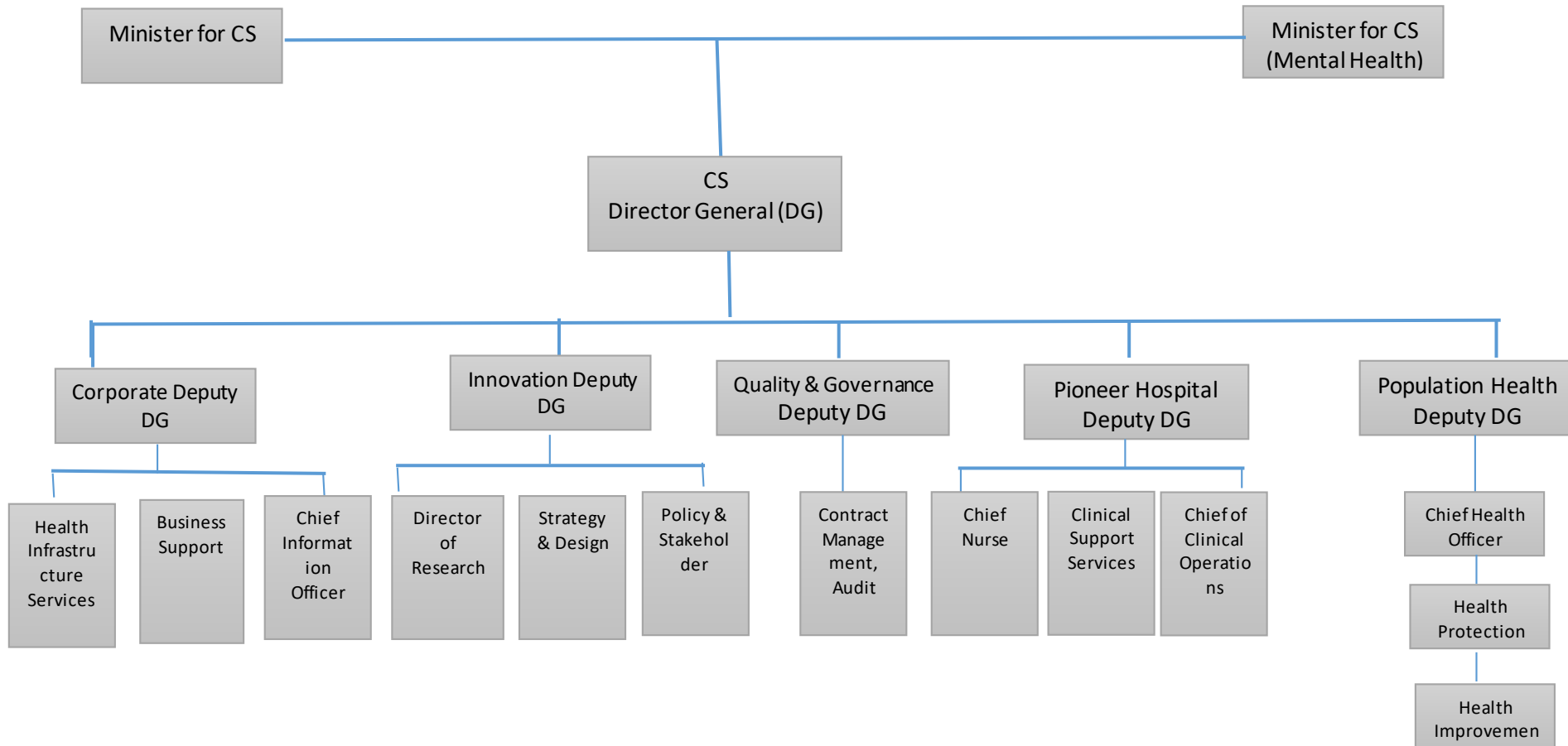
Transparency: provides information for citizens about what their Government is doing through issuance of reports on activities and accomplishments and thereby increasing levels of trust, confidence, public support and legitimacy for public sector organisations (Tan et al 2011).

Economy: is defined as acquiring resources in appropriate quantity and at least cost (Kloot 1999).

Efficiency: efficiency is defined as maximising outputs for a given set of inputs, or minimising inputs for a required output (Kloot 1999).

Effectiveness: is defined as the extent to which the defined task has been accomplished (Palmer, 1993) and is consistent with notion of non-financial accountability to the stakeholders. Effectiveness may partly be measured in terms of quality of service mainly through the adoption of quality assurance processes, customer satisfaction and so forth (Carter, 1991).

Appendix B: Central State (CS) Organisational Structure



Appendix C: Case Study Protocol

The case study protocol contains the procedures that was used to collect data during this research project. Yin (1994) describe a case study protocol as set of guidelines that can be used to structure and govern a case research project. The case study research protocol include: an overview of case study research project; field procedures; case study questions; and a guide for the case study report as recommended by Rowley (2002). Table C1 outlines these steps and references the documents which are included are included in this section.

Table C1: Steps and Actions in the Research's Case Study Protocol

Step	Action	Reference
1	Letter of Consent from the organisation	C1
2	Orientation to research project: Information for respondents	C2
3	Consent form for each participant interview	C3
4	Interview protocol including structured questionnaire	C4: Refer to Appendix D
5	Checklist of documents to be reviewed	C5
6	Case study database established for documentation of evidence	C6
7	Letter inviting participants to attend interviews	C7

C1: Letter of consent from case organisation



CASE A
Human Research Ethics Committee
Low Risk Sub-Committee

Mrs Shandya Nand Deo
7 Puddy St
Bonython ACT 2905

Dear Mrs Deo

ETHLR.16.016

The **CASE A** Human Research Ethics Committee's Low Risk Sub-Committee received notification of the proposed study:

Factors Shaping the use of an outcome-based performance management system in CASE A at its meeting of 27 January 2016.

I am pleased to inform you that, following further correspondence, your application has been approved out of session.

The Sub-Committee agreed that the application is for low risk research and determined that the research meets the requirements of the National Statement on Ethical Conduct in Human Research and is ethically acceptable.

I attach for your records an Outcome of Consideration of Protocol form.

I confirm that the **CASE A** Human Research Ethics Committee is constituted according to the National Statement on Ethical Conduct in Human Research 2007 and is certified for single review of multi-centre clinical trials. **CASE A** HREC operates in compliance with applicable regulatory requirements and the International Conference on Harmonization Guidelines on Good Clinical Practice.

Yours sincerely

A handwritten signature in cursive script that reads 'Louise Morauta'.

Louise Morauta PSM PhD
Chair
CASE A Human Research Ethics Committee
Low Risk Sub-Committee

29 April 2016

C2: Participant Information Sheet



Participant Information Sheet

Factors Shaping the use of an outcome-based performance management system in Case A

You are being invited to take part in a research study. Before you decide to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask the study team any questions you have and request any further information you need.

Why is this study being done?

This project is being undertaken as part of a Doctor of Business Administration Research.

The purpose of this project is to examine and develop understanding of how the internal factors: leadership and management commitment, employee engagement and organisational culture shape the use of outcome-based performance management system in Case A within Central State public service. In doing so, this proposed research will adopt the institutional theoretical framework to explain the influence of internal factors on the use of outcome-based performance management system in Case A.

The research team requests your assistance and for you to share with us your knowledge and understanding of the outcome-based performance management system and your opinion on the factors shaping the system in Case A.

What is involved in the study?

Your participation will involve participation in an interview that will take approximately thirty minutes of your time. The interview will take place at a time and venue that is convenient to you. Further clarifications and updates will be obtained by email or telephone contact if necessary.

Outlined below are some of the examples of the questions which will be included in the interview:

1. Briefly describe how the process of the outcome-based performance management systems (OBPM) works in Case A?
2. How do you think that employee engagement influences and to what extent do they determine the use of OBPM?
3. Does Case A display performance management culture such as outcome orientated culture?
4. How important do you think is good leadership to make the OBPM system effective?

Why have I been chosen?

You have been identified as a potential participant in this research due to your knowledge and understanding of Case A's internal and external performance reporting, particularly the collation and dissemination of the outputs and outcome measures.

Do I have to take part?

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Are there any risks?

The Researcher's assessment of the overall level of risk to the participants is low risk and the only foreseeable risk associated with this study is one of discomfort, whereby the participants will need to commit 30 minutes of their time to participate during the interviews in the research.

Are there any benefits?

It is expected that this project will not directly benefit you. However, your participation is likely to help us find out more about how leadership/management commitment, employee engagement and organisational culture influences the use of outcome based performance management system and the knowledge of these factors may benefit the organisation as a whole since it could be used as means of improving the use of OBPM within Case A.

The study will give Case A as a whole an opportunity to discuss its own practice and the understanding of factors influencing the use of outcome-based performance management system, which can be applied in any public sector context. This will result in improved transparency and accountability, which will be beneficial to the community as a whole.

What are the costs?

There will be no cost to you for participating in this study.

Access to the results of the study

Your participation during the semi-structured interview in the project will be audio recorded with your consent and will be transcribed.

If required you will be provided with transcripts of your interview which will allow you to amend your responses if needed.

What about confidentiality?

All comments and responses will be treated confidentially unless required by law.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

If you have any questions, please contact the research team

Shandya Deo, phone: 0421856336 and shandya.nand@gmail.com

Should you have any problems or queries about the way in which the study is conducted, and do not feel comfortable communicating with the staff conducting this survey, please contact: Case A Human Research Ethics Committee (CSH-HREC), Level 6, Building 10, Pioneer Hospital

C3: Consent Form for Participation in a Research Project



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Consent Form for Participation in a Research Project.

I, _____ (name of participant)

of _____ (address)

have been asked to consent to participation in a research project entitled:

Factors Shaping the use of an outcome-based performance management system in Case A

In relation to this study I have read the Participant Information Sheet and have been informed of the following points:

1. Approval has been given by Case A Human Research Ethics Committee.

The aim of the study is to examine and develop understanding of how the internal factors: leadership and management commitment, employee engagement and organisational culture shape the use of outcome-based performance management system in Case A within Central State public service. In doing so, this proposed research will adopt the institutional theoretical framework to explain the influence of internal factors on the use of outcome-based performance management system in Case A.

2. The results obtained from the study may or may not be of direct benefit to me.
3. The study procedure will involve 30 minutes of their time to participate during the interviews in the research (including audio recording and transcription)
 - Audio recording
4. Should I have any problems or queries about the way in which the study was conducted, and I do not feel comfortable contacting the research staff, I am aware that I may contact Case A Human Research Ethics Committee Secretariat, Central State
5. I can refuse to take part in this project or withdraw from it at any time without giving a reason
6. I understand that while the results of the research will be made accessible my involvement and my identity will not be revealed.

After considering all these points, I accept the invitation to participate in this study.

Name: (please print) _____ Date: _____

Signature (Participant) _____

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**Factors Shaping the use of an outcome-based performance management system in Case A,
11/01/2016**

C4: Interview questionnaire Refer to appendix D

C5: Checklist for document collection

<i>Documents</i>	
Case Organisation	Annual Reports
	Central State Government Performance Framework
	Portfolio Budget Statements
	Report on Government Services
	Corporate Plan
	Performance Statement
	Policy Documents

C6: Case study database established for documentation of evidence

Hard Copy Procedure

- Interview protocol notes and consent form located in filing cabinet at residence (locked).

Soft Copy Procedure

- After each day of interviewing, audio recordings are transcribed onto word document:
Interview Protocol – Interview response table file.

C7: Letter inviting participants to attend individual interviews – Executives and Managers

Doctor of Business Administration Research Project: Factors Shaping the Use of Outcome Based Performance Management (OBPM) in Case A.

Sir or Madam

You are being invited to take part in a research project. This project is being undertaken as part of Doctoral Research Project. The purpose of this project is to examine and develop understanding of how the internal factors: leadership and management commitment, employee engagement and organisational culture shape the use of OBPM in Case A. In doing so, this proposed research will adopt the institutional theoretical framework to explain the influence of these internal factors on the utilisation of OBPM.

As a Senior Executive/Senior Manager, I request your assistance to share your knowledge and understanding of the OBPM and your opinion on the factors shaping the system in your organisation.

Your participation will involve participation in an interview that will take approximately thirty minutes of your time. The interview will take place at a time and venue that is convenient to you. Further clarifications and updates will be obtained by email or telephone contact if necessary.

There is little identifiable risk for this study as the interviews will take place within your office environment. You will not incur any costs as a result of involvement in this study. Your participation is voluntary. If at any time you wish to withdraw your participation, you are free to do so.

If you have any question prior to your participation or at any time throughout the study, please do not hesitate to contact me.

Best regards

Shandya N Deo

Appendix D: Interview Protocol

University of Southern Queensland (USQ)
Doctor of Business Administration Research (DBAR) Interview Questions
Topic: Factors Shaping Outcome Based Performance Management System in Case A

D1: Interview Questionnaire for Case A Executives/Manager

Case A's Performance Measurement and Outcome Based Performance Management (OBPM) System

5. Can you briefly describe how the process of the outcome-based performance management systems (OBPM) works in Case A?
6. What do you think is the main purpose of the use of OBPM system in Case A?
7. Do you think that the process of OBPM contributes to Case A's strategic planning?
8. Can you briefly explain how these performance measures report on whether Case A is meeting its business objectives?
9. Can you briefly explain how the performance information contributes towards executive and management decision-making?
10. What is your own assessment of the effectiveness of Case A's OBPM systems, what works well and what can be improved?

Organisational Culture

11. The use of OBPM requires continuous communication between leaders, managers and the subordinates. Do you think Case A administrative culture supports these sorts of dialogues?
12. Do you think that Case A display outcome oriented performance management culture?
13. Do you think that Case A demonstrate strong evaluative and learning culture that supports the use of OBPM system in the organisation?
14. Do you think that Case A introduced incentive system to motivate people and encourage performance improvement?
15. Does the cultural factors such social networks and shared understanding supports the use of OBPM in Case A?

Leadership and Management Commitment

16. How important do you think is good leadership in making the OBPM system effective in Case A?
17. Do you think that the leaders of Case A are supportive of this system?

18. Do you think that Case A leaders focus on results, encouraging learning to achieve higher performance results?
19. What do you think about the commitment level of management towards the use of OBPM in Case A?
20. Can you conclude that OBPM system has been success in Case A? Why?
21. How do you see the future of the OBPM system in Case A?

D2: Interview Questionnaire for Case A Employees

Case A's Performance Measurement and Outcome Based Performance Management (OBPM) System

1. Describe the outcome-based performance management systems (OBPM) in Case A.
2. Can you explain how the process of the outcome-based performance management systems (OBPM) works in Case A?
3. What do you think is main purpose of the use of OBPM system in Case A?
4. What is your own assessment of the effectiveness of Case A's OBPM systems, what works well and what can be improved?
5. Do you get involved in the planning process i.e. in the development of the organisation's goals, objectives and strategies?
6. Do you feel you have the opportunity to have an influence on the choice of performance measures including outcomes and their use?
7. How are such performance measures (outcomes) explained and do you understand them?
8. Does the OPBM help motivate you in your job?
9. Do you get involved in the development of the OBPM system?
10. Do you think Case A has the required expert human capacity to facilitate the use of OBPM system?
11. What training is provided to assist you to use of OBPM system? Do you think Case A provides enough training and support to use the system in the organisations?

Appendix E: Thematic Analysis Phases as presented by Braun and Clarke (2006)

Phase Number	Phase Name	Phase Description
1	Familiarise yourself with the data	Transcribing data, reading and rereading the data, noting down initial ideas.
2	Generate Initial Codes	Coding interesting features of the data in a systematic fashion across the entire data set.
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4	Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5	Defining & naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Appendix F: Case A's Strategic Objectives and Indicators

Strategic Objectives	Strategic Indicators
1. Removals from waiting list for elective surgery	Number of people removed from Central State elective waiting lists for surgery managed by Central State public hospitals
2. No waiting for access to emergency dental health services	Percentage of assessed emergency clients for dental health services seen within 24 hours
3. Improving timelines of access to radiotherapy services	Percentage of cancer patients who commence radiotherapy treatment within standard timeframes
4. Improving the breast screen participation rate for women aged 50 to 69 years	Proportion of women aged 50 to 69 who have a breast screen in the 24 months prior to each counting period
5. Reducing the usage of seclusion in mental health episodes	Proportion of mental health clients who are subject to seclusion episode while being an admitted patient in an Central State public mental health inpatient unit
6. Maintaining reduced rates of patients return to an Central State public acute psychiatric inpatient unit	Proportion of clients who return to hospital within 28 days of discharge from an Central State public acute psychiatric unit following an acute episode of care
7. Reaching the Optimum Occupancy Rate for all Overnight Hospital Beds	Mean Percentage of Overnight Hospital Beds in Use
8. Management of Chronic Disease: Maintenance of the Highest Life Expectancy at Births in Australia	Maintenance of the Highest Life Expectancy at Births in Australia
9. Lower Prevalence of Circulatory Disease than the National Average	Proportion of the Central State population diagnosed with some form of cardiovascular disease
10. Lower Prevalence of Diabetes than the National Average	The Proportion of the Central State Population Diagnosed with Some of Diabetes
11. Addressing Gaps in Aboriginal and Torres Strait Islander Immunisation Status	Immunisation Rates – Central State Aboriginal and Torres Strait Islander Population
12. Participation Rate in the Cervical Screening Program than the National Average	Two Year Participation Rate in the Cervical Screening Program
13. Achieve Lower than the Australian Average in Decayed, Missing, or Filled Teeth (DMFT) Index	The Mean Number of Teeth with Dental Decay, Missing or Filled Teeth at Ages 6 and 12
14. Reducing the Risk of Fractured Femurs in Central State Residents Aged Over 75 years	Reduction in the Rates of Broken Hips (Fractured Neck of Femur)
15. Reduction in the Youth Smoking Rates	Percentage of Persons Aged 12 and 17 Years Who Smoke Regularly

Appendix G: Case A's Accountability Indicators

- **Output 1.1 – Acute Services**
 - a. **Admitted Services – National Weighted Activity Units**
 - b. **Non-Admitted Services – National Weighted Activity Units**
 - c. **Emergency Services – National Weighted Activity Units**
 - d. **Acute Admitted Mental Health Services – National Weighted Activity Units**
 - e. **Sub-Acute Services – National Weighted Activity Units**
 - f. **Calvary Services – National Weighted Activity Units**
 - g. **Mean waiting time for clients on the dental services waiting list**
 - h. **Percentage of the Women's Health Services Intake Officer's clients who receive an intake and assessment service within 14 working days of their initial referral**
- **Output 1.2 – Mental Health, Justice Health and Alcohol and Drug Services**
 - a. **Adult mental health program community service contacts**
 - b. **Children and youth mental health program community service contacts**
 - c. **Mental Health Rehabilitation and Specialty Services**
 - d. **Proportion of detainees at the Alexander Maconochie Centre with a completed health assessment within 24 hours of detention**
 - e. **Proportion of detainees in the Bimberi Youth Detention Centre with a completed health assessment within 24 hours of detention**
 - f. **Justice Health Services community contacts**
 - g. **Percentage of current clients on opioid treatment with management plans**
 - h. **Alcohol and Drug Services community contacts**
- **Output 1.3 – Public Health Services**
 - a. **Samples analysed**
 - b. **Compliance of licensable, registrable, non licensable activities at time of inspection**
 - c. **Response time to environmental health hazards, communicable disease hazards relating to measles and meningococcal infections and food poisoning outbreaks is less than 24 hours**
- **Output 1.4 – Cancer Services**
 - a. **Total breast screens**
 - b. **Number of breast screens for women aged 50 to 69**
 - c. **Percentage of women who receive results of screen within 28 days**

d. Percentage of screened patients who are assessed within 28 days

-

- **Output 1.5 – Rehabilitation, Aged and Community Care**

- a. **Number of nursing (domiciliary and clinic based) occasions of service**

- b. **Number of allied health regional services (occasions of service)**

Appendix H: Central State Local Hospital Network Strategic Objectives and Strategic Indicators

Strategic Objectives	Strategic Indicators
1. Percentage of Elective Surgery Cases Admitted on Time by Clinical Urgency	<ul style="list-style-type: none"> Percentage of Elective Surgery Cases Admitted on Time by Clinical Urgency
2. Improved Emergency Department Timelines	<ul style="list-style-type: none"> The proportion of Emergency Department Presentations that are Treated within Clinically Appropriate Timeframes The proportion of Emergency Department presentations whose length of stay in the Emergency Department is four hours or less
3. Maximising the Quality of Hospital Services	<ul style="list-style-type: none"> The proportion of people who undergo a surgical operation requiring an unplanned return to the operating theatre within a single episode of care due to complications of their primary conditions The proportion of people separated from Central State public hospitals who are re-admitted to hospital within 28 Days of their separation due to complications of their conditions (where the re-admission was unforeseen at the time of separation) The number of people admitted to hospital per 10,000 occupied bed days who acquire a Staphylococcus Aureus Bacteraemia infection (SAB infection) during their stay. The Estimated Hand Hygiene Rate

Table 5: Central State Local Hospital Network Accountability Indicators

-
- a. **Admitted Services – National Weighted Activity Units**
 - b. **Non-admitted Services – National Weighted Activity Units**
 - c. **Emergency Services – National Weighted Activity Units**
 - d. **Acute Mental Health Service – National Weighted Activity Units**
 - e. **Sub-Acute Services - National Weighted Activity Units**
 - f. **Total in Scope - National Weighted Activity Units**
 - g. **Percentage of mental health clients with outcome measures completed**
 - h. **Proportion of mental health clients contacted by a Health Directorate community facility within 7 days post discharge from inpatient care**
-

Appendix I: Thematic Analysis – Initial Codes Case A Executives

Phase 1: Became familiar with the data

- Transcribed verbal data into written form after completing data collection (interviews that were 30 minutes to 1 and half hour in length resulting in nearly 3-5 pages of transcribed per respondent).
- Checked the transcripts back against the original audio recording for accuracy.
- Read and re-read the data in order to become familiar with what the data entails

Phase 2: Generated Initial Codes

- Produced initial codes and this was done by documenting reoccurring patterns.
- Coding was done using machine learning to organise the data into meaningful groups and to document reoccurring patterns.
- Data extract was carefully read for its semantic meaning and given an appropriate code name that best reflect the essence of the extract.
- Combine all codes i.e. put all codes in one file and determine unique codes
- Data extracts which shared the same semantic meaning were grouped together and were assigned same code name
- This exercise resulted in generation several distinct codes names (Appendix 1A)

Initial Codes

The top three codes are analysed and illustrated in the table below. Details of the other codes and code counts are shown in Appendix IA.

Level of Importance	Codes	Code Count
1	<ul style="list-style-type: none"> • Case A leaders are supportive of the use of OBPM • PMS perceived as some task that needs to be ticked off • Good leadership is instrumental in making OBPM effective • Leaders focus on trying to get improved output results • Strong support from the political leaders • The culture is that staff work in silos 	5
2	<ul style="list-style-type: none"> • Performance management culture Case A allows planning, budgeting, service delivery, reporting and rewarding performance • OBPM make positive contribution towards executive decision making • No positive evaluative and learning culture is embedded in Case A 	4

Level of Importance	Codes	Code Count
3	<ul style="list-style-type: none"> • Disconnect between strategic planning and KPIs • Lack of focus on organisational learning • OBPM is to ensure that people are held accountable • Potential for better alignment of strategic plans to OBPM • Non-financial rewards and recognition program in place to encourage performance improvement • No financial incentive system in place to motivate people and encourage performance improvements • OBPM has been a partial success • OBPM contributes towards efficient and effective accomplishment of Case A's business objectives • No positive culture that support ongoing communication between managers' and their staff 	3

Summary of the findings

- The respondents (Case A Executives) are of the view that outcome based performance management (OBPM) system has been partially successful in Case A since it ensures delivery of good quality and best care to the patients, monitors organisational performance, hold people accountable for public funds and contributes towards improvements in service delivery.
- OBPM to encourage a performance management culture, particularly planning, budgeting, delivery of services, monitoring/reporting and rewards.
- Performance management culture displays output-oriented culture – output describes Case A's key deliverables and are measured against the accountability indicators.
- Performance management culture also displays outcome-oriented culture where Case A uses proxy outcome indicators to measure patient and overall health outcomes.
- Performance management culture enables the fulfilment of the internal external reporting requirements of the organisation.

- With the advent of more sophisticated IT system called Performance Information Portal (PIP), Case A is able to monitor and **report on real time performance data** reliably. This is predominantly in relation to accountability indicators such as percentage of elective surgery cases admitted on time by clinical urgency and Emergency Department timeliness known as National Elective Surgery Target (NEST) and National Emergency Access Target (NEAT).
- An executive said that the implementation of **OBPM is very patchy**, while another executive used the word **haphazard to describe the process** of the implementation of OBPM since everyone has not really embraced the concept and current system does not really lead to a discussion where the staff feel that outcomes are covered in very much detail.
- All respondents in the category think that **good leadership is instrumental** in making OBPM effective in the organisation in term of the sense of leading from the top and the highest levels of leadership demonstrating the level of commitment to use of OBPM in the organisation which needs to cascade down the line. It is key leadership objective to successfully implement OBPM is Case A. An executive think that leaders need to be accountable for outcomes of the organisation and need to communicate that sense of commitment to their staff. Another executive said that **leadership is crucial** in creating consistency about what good performance is.
- Currently, the organisation is in the process of change as the new Director General has established new strategic priorities which focus on delivering a connected health system that puts the patients in the centre of everything the organisation does, establishing a sustainable health system driven by innovation and building the workforce of the future. The future plan is to develop and progress new models of care and approaches to achieve more coordinated and integrated service delivery. Currently, delivery of health service fragmented where the doctors, nurses and allied health staff in Case A work in isolation and patient care is not coordinated and fragmented. The executives emphasised that there is an organisational culture that demonstrates that **staff work in silos**. **The focus is more on silos**.
- The new approach aims to address the current service fragmentation and achieve greater efficiencies and value from the health delivery system in the Central State. An integrated and well-coordinated care pathway for patients is essential to achieve excellent health outcomes and reduce waste in the Case A care system. This ensures that the needs of consumers are placed at the centre, resulting in improved patients satisfaction and better health outcomes.
- The respondents think that it is timely to review the current system and implement an amended OBPM that aligns to a change agenda.
- The respondents also believe that **Case A leaders are supportive of the use of OBPM** in the organisation. Nonetheless, the nature of the business puts pressure on the leaders to focus more on tactical and operational matters.

- Strong support from the political leaders for the use of OBPM in Case A.
- The respondents contemplate that Case A leaders focus on results and encourage learning to achieve higher performance results.
- The respondents think that OBPM make positive contribution towards executive decision making.
- However, an executive strongly feel that Case A culture demonstrate that OBPM is perceived as some task that needs to be ticked off. The executive feels that the culture has to improve and there needs to be more education around OBPM since there is lack of understating amongst people as to what the organisation trying to achieve.
- The respondents think that there is no positive culture in Case A that support ongoing communication between managers' and their staff. An executive believes that the communication of strategic plans and strategic directions and the communication from the executives to front line staff need to be improved. "I think there are disconnects there". The respondents feel that there tends to be an organisational culture that focus more on silo's rather than understanding the broader organisation views. There need to be much more active communication from the leaders and managers to support staff to understand broader objectives of the organisation and understanding of their roles within those broader organisational goals.
- Another executive does not know if the information filters down very well to people on the shop floor. This is because of the hierarchy in the organisation, that is, the number of different layers the information has to go through, sometimes the messages get lost and perhaps the accuracy of the message changes as it filters down or it just does not get down to the people on the shop floor. "Similarly, I don't know if the information comes up as well as it could."
- However, another executive feels that this is such a diverse organisation and I think in some areas we do it very well and some areas may not do it. "I think it depends on local leadership".
- Case A displays positive culture around social network which support the use of OBPM.
- There are some complexities associated with shared understanding within the organisation.
- The respondents think that no positive evaluative and learning culture is embedded in Case A. The respondents feel that there no strong culture of evaluation or strong culture of looking back due to lack of evaluation awareness, siloed culture, lack of evaluation skills, no evaluation plan and lack of self-reflection. Case A needs to improve in this area.
- There is a lack of focus on organisational learning.

- The executives feel that there is potential for better alignment of Case A's strategic plans with OBPM. The clear strategic plan which links to performance measures and performance management system is sort of undeveloped. The overall performance expectations have remained fairly static over time and while we have Case A's strategic plan and the two are not as aligned as they could be.
- **There isn't really any financial incentive system** in place to motivate people and encourage performance improvements. Nevertheless, **there are Non-financial rewards and recognition program** in Case A encourages performance improvement. The executives feel that non-financial rewards do motivate people and encourage performance improvements.

Identification of Themes

- **Phase 3:** Develop the themes by sorting different codes into potential thematic classifications
 - OBPM ensures accountability
 - OBPM facilitates performance reporting
 - Performance Management culture
 - OBPM allows rewards
 - Output/outcome culture
 - OBPM enables fulfilment of internal external reporting
 - OBPM ensures Real-time performance reporting
 - OBPM contribute towards executive decision-making
 - Leadership is crucial, leaders are supportive of the use of OBPM, leaders focus on achieving of output results
 - Political influence
 - Focus is on silo culture
 - Lack of positive communication culture
 - Lack of shared understanding
 - Positive culture around social networks
 - No positive evaluation culture
 - Lack of focus on learning culture
 - No financial incentive system
- **Phase 4:** Review, Define and Name themes by identifying which aspects of data each theme captured and identifying the essence of what each theme is about.
 - Performance culture
 - Silo culture
 - Weak evaluative culture
 - The importance of leadership
 - Political leadership

Appendix IA: Initial Codes - Case A Executives

Codes	Code Count
Case A leaders are supportive of the use of OBPM	5
PMS perceived as some task that needs to be ticked off	5
Good leadership is instrumental in making OBPM effective	5
Leaders focus on trying to get improved results	5
Strong support from the political leaders	5
OBPM encourages performance management culture – planning, budgeting, delivery of services, monitoring/reporting and rewarding performance	5
Output-oriented culture	5
Outcome-oriented culture (proxy indicators are used to measure patient and overall health outcomes)	5
OBPM make positive contribution towards executive decision making at divisional level	4
No positive evaluative and learning culture is embedded in Case A	4
No positive culture that support ongoing communication between managers' and their staff	4
Case A displays positive culture around shared understanding and social network which support the use of OBPM	4
Social networks are effective and support the use of OBPM	4
No positive evaluative and learning culture is embedded in Case A – refinement of KPIs does not form part of evaluation cycle	4
No financial incentive system in place to motivate people and encourage performance improvements	3

The culture is that staff work in silos, and are disconnected from focusing on broader organisational goals	3
OBPM is to ensure that people are held accountable	3
potential for better alignment of strategic plans to OBPM	3
OBPM contributes towards efficient and effective accomplishment of Case A's business objectives	3
Non-financial rewards and recognition program in place to encourage performance improvement	3
OBPM has been a partial success	3
Some complexities associated with shared understanding	3
Potential to create positive culture of communication	2
The implementation of OBPM is haphazard	2
Create awareness about the OBPM to make it more effective	2
The main purpose of OBPM is to ensure that people are held accountable for expenditure of public funds	2
Potential for various divisions to work collaboratively within organisation to ensure delivery of best care to patients	2
Strategic priorities are not aligned to the performance measures	2
The main purpose of OBPM is to ensure delivery of good quality and best care to the patients	2
No positive outcome-oriented culture is exhibited	2
Proxy indicators are used to measure overall health outcomes	2
Accountability indicators reported internally and externally	2
Inconsistent approach to outcome-oriented culture	2
More emphasis on solving tactical and operational matters	2

Review OBPM to align organisational goals with division, branch and staff goals	2
Potential for better alignment of business objectives with Performance measures and performance data that can assist executive decision making	1
Outcome measures such as patient satisfaction is not embedded in staff performance agreement	1
There is prospect to build consolidated OBPM and getting it more refined	1
Patient satisfaction surveys and patient care reports includes indicators against national standards	1
The use of OBPM ensure improvements in staff performance	1
PMS is considered not useful	1
PMS is not considered as useful	1
Some leaders focus on trying to get improved results	1
PMS is seen as negative	1
The main use of OBPM ensures delivery of good quality and efficient care to the patients	1
Outcome indicators are difficult to measure	1
Potential for better alignment of staff individual learning plans with organisational goals and objectives	1
Review OBPM and check its relevance	1
Some leaders do not have positive outlook towards OBPM	1
Potential for effective use of performance information to enable performance improvement	1
Potential to augment managers' understanding of the value and criticality of OBPM	1

Potential to link new strategic priorities to individual performance agreements	1
Review OBPM to align new strategic priorities with performance measures and performance data	1
The implementation of OBPM is very patchy	1
Strong evaluative and learning culture is embedded in Case A	1
OBPM has been successful in making performance improvements	1
Operational indicators reported internally via monthly scorecard reports	1
Individual performance agreements of staff are linked to the overall organisational goals and objectives	1
Managers are committed towards the use of OBPM in Case A	1
Linking non-financial rewards to performance	1
Liability	1
Lack of understanding and visibility that performance measures report on organisation meeting its business objectives	1
Lack of staff skill in performance evaluation	1
Internal reporting on outcome indicators	1
Inconsistent approach to communication between leaders, managers and subordinates in a diverse organisation	1
OBPM needs to support staff to contribute towards achieving organisational objectives	1
Health round table is used as benchmarking tool which provide clinicians on their performance compared to their peers	1
Executives are held accountable through scorecard meetings	1
Development of enterprise wide data system	1

Continue with improving staff performance, patients care and management of resources in future	1
Better alignment of OBPM to the strategic priorities is needed in future that supports achievement of organisational objectives	1
Case A exhibits strong outcome oriented culture as it is working progressively towards outcome measurement	1
Modification of OBPM is needed to align it with the organisation's objectives	1
Monthly scorecard reports internally on operational indicators	1
Most leaders are committed towards improving OBPM	1
No positive culture to facilitate communication and demonstrate benefits of performance management	1
Not sure about the commitment level of management towards the use of OBPM	1
OBPM act as an incentive	1
OBPM assists staff professional development	1
OBPM contribute towards policies, procedures, business plans, service plans, strategies and frameworks	1
OBPM contribute towards strategic planning	1
OBPM contributes towards improvements in service delivery	1
OBPM contributes towards performance evaluation	1
OBPM contributes towards performance improvements	1
OBPM does not contributes towards efficient and effective accomplishment of Case A's business objectives	1
OBPM has become more sophisticated over time	1
OBPM helps monitor organisational performance	1

OBPM is really useful and relevant for managers	1
OBPM is used at divisional level to assess their performance	1
There is strong positive culture that supports continuous improvements and performance management by outcomes and outputs	1

Appendix J: Thematic Analysis Summary Table Case A Employee

Phase 1: Became familiar with the data

- Transcribed verbal data into written form after completing data collection (interviews that were 30 minutes in length resulting in nearly 2-3 pages of transcribed data per respondent).
- Checked the transcripts back against the original audio recording for accuracy.
- Read and re-read the data in order to become familiar with what the data entails.

Phase 2: Generated Initial Codes

- Produced initial codes and this was done by documenting reoccurring patterns.
- Coding was done manually to organise the data into meaningful groups and to document reoccurring patterns.
- Data extract was carefully read for its semantic meaning and given an appropriate code name that best reflect the essence of the extract.
- Combine all codes i.e. put all codes in one file and determine unique codes.
- Data extract States which shared the same semantic meaning were grouped together and were assigned same code name.
- This exercise resulted in generation of multiple distinct codes names.

Initial Codes

The top three codes are analysed and illustrated in the table below. Details of the other codes and code counts are shown in Appendix JA.

Level of Importance	Codes	Code Count
1	<ul style="list-style-type: none"> • OBPM is useful • Employees' non-involvement in strategic planning • Case A's performance is assessed against accountability indicators • Multiple information systems 	11
2	<ul style="list-style-type: none"> • Case A's performance is assessed internally against operational indicators • Employees' non-involvement in OBPM design 	9
3	<ul style="list-style-type: none"> • Employees understanding of KPIs • OBPM-related training • Availability of skilled human expertise 	8

Preliminary findings

- The majority of the respondents (Case A Staff) are of the view that outcome-based performance management (OBPM) system is useful in Case A as it enhances internal and external accountability by assessing and reporting organisation's performance against:
 - strategic and accountability indicators set in the CENTRAL STATE Budget Papers
 - operational indicators through monthly scorecard reports and quarterly performance reports
 - Cross border Performance Indicators
- Case A's performance is reported to external agencies like Commonwealth Department of Health, Australian Institute of Health and Welfare (AIHW), Independent Hospital Pricing Authority, CENTRAL STATE Treasury, CENTRAL STATE Legislative Assembly and CENTRAL STATE Office of Auditor General.
- The Case A receives Activity Based Funding, Block Funding, Public Health Funding and Cross Border Activity Based Funding from Commonwealth and CENTRAL STATE Government under the National Health Reform Agreement for the provision of health services in the CENTRAL STATE and reports back on its performance to national agencies like Independent Hospital Pricing Authority.
- The National Health RoundTable reports on Case A clinical unit's performance with most comparable peer health services across Australia and New Zealand on key performance measures such as emergency department activity length of stay, quality of care, readmission rate, complication rate, discharge home rate. The Health RoundTable is used as the national benchmarking tool to achieve best practice to improve operational practices and performance in the organisation in the areas such as acute care, mental health, sub-acute care, nursing, surgical journey, allied health, patient care and safety and so forth.
- The staff think that OBPM is effective in:
 - holding service providers accountable (government and non-government organisations)
 - informing decision making where the real time intranet based reporting system assists end users to make informed decisions
 - facilitating provision of better patient care where patients is the central focus of everything the organisation does and this patient-centric care is delivered

within a workplace culture that showcases Case A's values of care, excellence, integrity and collaboration

- **facilitating improvements in service delivery** through ensuring the principles of safety and quality
 - **ensuring efficient use of resources** by designing sustainable services that deliver health outcomes efficiently and embed a culture of research and innovation within the organisation.
 - **improving transparency** in relation to expenditure of public funds
 - **facilitating performance improvements**
 - **costing of service delivery** and seeking funding
 - **contributing towards service planning**
 - **meeting Case A's business objectives**
- Case A's performance data is stored in the organisation's data bank or data warehouse, which captures data from multiple sources such as CENTRAL STATEPAS, Emergency Department Database, Pathology Database, Breast Screen Database and so forth. The staff highlighted that **multiple data source** leads to **data integrity and quality issues**, particularly at the data entry level. The data validation tool is used to maintain higher quality of data in the system. It also indicated technological issues related to the compatibility of the new system with existing systems.
 - A staff member indicated that there is potential for aligning and integrating **multiple databases**. To address the integrity and quality issues identified at the data entry level, a staff member suggested improvements such as for CENTRAL STATEPAS training to be specialty based because there are so many modules of CENTRAL STATEPAS. The current generic nature of CENTRAL STATEPAS training, does not provide adequate training for staff resulting in poor quality of data being entered.
 - The staff use data tool like **SQL** to extract data from the databank and use the analytical tools such as **Excel and R** to process and analyse data and produce reports.
 - Majority of the respondents said that they have received **in-house training** which assist to use OBPM.
 - The staff indicated that they were **never involved in the planning process**, that is, in the development of the organisation's goals and objectives.
 - Case A has adopted **top-down approach**, where the senior leadership team formulated strategic, tactical and operational performance metrics for the organisation. **These KPIs were cascaded** to the divisional heads and their employees
 - Only few staff indicated that they had **influence on the choice of performance measures** (operational) while other staff member **did not have any influence on the choice of performance measures**. A staff member indicated that performance measures (strategic and accountability indicators) are developed by higher level executive team.

- The staff indicated their **non-involvement in OBPM design**. One staff member was involved in the design of Patient Track Database, two staff contributed towards design of the performance reports and another staff was involved in designing the data validation tool. While two staff members did not have any involvement in the design of the OBPM.
- A staff member think that **OBPM is perceived as some task that needs to be ticked off**, particularly, in the case of non-government organisations who provide substandard performance reports. OBPM does not work well in terms capturing performance data from non-government organisations. Case A does not have required human expertise to assess the performance and financial reports submitted by the NGOs.
- The findings revealed the **availability of adequate skilled human expertise** to facilitate the use of OBPM, including executives, line managers, employees and PIB Branch.
- **PIB Branch has technical human expertise** including staff with SQL, SSRS, SIS and Java skills
- **Phase 3: Search for themes by sorting different codes into potential themes**
 - OBPM is useful and effective
 - Top-down approach to strategic planning
 - Cascading of KPIs to the employees
 - Lack of employee involvement in strategic planning
 - Lower level employee participation in the design of OBPM systems
 - Employees' ability to understand the type of KPIs interpret the meaning of KPIs
 - Use of multiple databases
 - Adequate skilled human expertise
 - Support for professional development and training
- **Phase 4: Review, define and name themes by identifying which aspects of data each theme captured and identifying the essence of what each theme is about.**
 - Employee engagement: a missing component in strategic planning, KPI development and OBPM design
 - Employee understanding of KPIs and dispersed information systems
 - Employee know-how and OBPM-related training
 - OBPM usefulness

Appendix JA: Initial Codes

Codes	Code Count
OBPM is useful	11
Employees' non-involvement in strategic formulation	11
Case A's performance is assessed against accountability indicators	11
Multiple Information System	11
Employees' non-involvement in OBPM design	9
Case A's performance is assessed internally against operational indicators	9
Employees understanding of KPIs	8
OBPM-related training	8
Availability of skilled human expertise	8
Cascading of KPIs to employees	
Case A performance data	7
Performance data bank	7
Performance data processing	7
In-house training	6
OBPM hold service providers accountable	6
OBPM informs decision making	5
OBPM motivates me as it facilitate provision of better patient care	5
Data integrity and quality issues	4

Real time intranet based reporting system assists end users to make informed decisions	4
Effective communication about the performance measures from top-down	4
No contribution towards the choice and development of performance measures	4
Case A's performance is assessed against operational and accountability indicators	4
Thorough understanding of performance measures	4
Case A receives Central Stateivity based funding from commonwealth government and Central State government	4
No involvement in the planning process	4
OBPM facilitates improvements in service delivery	3
OBPM ensures efficient use of resources	3
Case A has required professional human expertise	3
Scorecard reports on operational indicators	3
Technical expertise	3
OBPM evaluates and reports on performance	2
OBPM is useful in improving transparency	2
Involved in the design of performance reports	2
Contributed towards the choice of operational level performance measures	2
OBPM facilitates performance improvement	2
Multiple performance data source systems	2
National reporting on accountability indicators	2

Performance reports are time consuming	2
No involvement in the design of the system	2
OBPM contributes towards service planning	2
Case A performance reporting	2
OBPM perceived as some task that needs to be ticked off	2
Patient safety and service quality indicators	1
Participated in developing KPIs	1
Case A does not have professional human expertise	1
Performance reports are linked to Case A strategic priorities	1
Potential for CENTRAL STATEPAS training to be specialty based to improve quality of data at entry level	1
Once i got involved in performance information branch planning process	1
Potential to improve performance reports	1
Report on accountability and operational indicators	1
Report on cross border patients	1
Report on DVA patients	1
Review underway to align of various performance reporting systems	1
Strategic and accountability indicators are developed by higher level executive team	1
Substandard performance reports received from non-government organisation	1
Uninterested in getting involved in the planning process	1

Potential for alignment of various performance reporting systems	1
OBPM ensures transparency	1
OBPM motivates me through presenting new challenge on daily basis	1
Expand capacity by getting more staff with management expertise	1
Case A receives block funding from commonwealth government and Central State government	1
Case A's cross border funding	1
Analytical expertise	1
Contributed towards design of measures	1
Contributed towards the choice and development of performance measures of non-government organisations	1
Contributed towards the choice of performance measures	1
Create awareness about the obpm to make it more effective	1
Data validation tool to maintain high quality and accuracy of performance data	1
I am motivated by getting poor quality performance reporting by non-government fixed	1
OBPM motivates me through presenting creative ideas which helps organisation immensely	1
Involved in design of data validation tool	1
Involved in the design of the patient track database	1
Lack of opportunity for analytical work	1
Medical data description	1

No comments	1
OBPM does not work well in terms capturing performance data from non-government organisations	1
OBPM helps meet Case A's business objectives	1
OBPM hold service providers including non-government organisations accountable	1
Used my own common sense to understand performance measures	1