AN INVESTIGATION INTO ORGANISATIONAL LEARNING BY
PUBLIC OFFICIALS CREATING AND MAINTAINING MULTI-
CHANNEL SERVICE DELIVERY INFORMATION SYSTEMS IN THE
NEW ZEALAND PUBLIC SECTOR

BY

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Abstract

Public sector organisations in New Zealand increasingly use multi-channel service delivery strategies to achieve better, faster and cheaper services to citizens. Within these organisations, public sector officials envision, define and implement complex service delivery information systems. This study examines the organisational learning mechanisms that those officials use. This provides a deeper insight into the role that organisational learning plays in multi-channel service delivery systems definition in the context of the New Zealand Public Sector.

A constructionist multiple-case study was undertaken with twenty nine officials from six public sector agencies that explores and characterises the learning mechanisms and knowledge transfer mechanisms that they use to understand and deliver services via physical and virtual channels. In addition, the research led to the development of a candidate conceptual model that integrates organisational learning, information systems and the unique organisational aspects of public sector service delivery.

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Chapter 1 Introduction

This research explores organisational learning amongst a cross section of public sector organisation (PSO) managers who envision, implement and operate multi-channel service delivery systems for New Zealand citizens. The following sections in this chapter introduce the main themes involved in the research. The remainder of chapter one from Section 1.6 onwards outlines the thesis and clarifies the conventions, delimitations, assumptions and vocabulary used.

1.1 Background

In New Zealand PSOs, services are routinely delivered using multiple channel strategies such as: online via Internet technologies including websites, and increasingly via channels such as mobile phone technologies, as well as through traditional face-to-face interactions. However, in many of these settings, where the product is of an informational nature, the separation of service and product delivery is often unclear (Bitner, 2001; Gronroos, 2007; Tate, Hope, & Johnstone, 2006). As a result, service delivery websites may be authored and their business rules defined and codified well in advance of the customer interaction. In that setting the immediacy of face-to-face service delivery is exchanged for the convenience of online alternatives such as 24 hour access via websites or mobile technologies (Barrutia & Gilsanz, 2009; Schultze & Orlikowski, 2004).

However, in face-to-face service it is easy to know exactly who the service agent is because technical competence and functional capabilities are inseparable; in the form of a real person (Baida, Ackermans, & Gordijn, 2003). In multi-channel government service delivery it is much harder to distinguish just who the service agent is and where service value is being created (SSC, 2009).

New Zealand citizens who may have formerly visited an agency in person or interacted via post now expect to deal with government online. Government has responded in recent decades by providing online alternatives for the majority of its services and in some cases the online channel has become the preferred or even the sole channel (SSC, 2003, 2009). This has included: information portals, online filing of statutory compliance documents, and democratic innovations such as e-participation.

Multi-channel PSOs need a management configuration that supports information flowing across and within delivery channels. This is achieved by defining processes and systems that support service objectives.

To meet those service objectives, the service delivery systems that comprise the ‘back-office’ of multi-channel services, must be developed and operated by managers who can interpret the strategic intentions of their senior leadership, meet expectations of multiple stakeholder groups and deliver efficient and effective government services (Buckley, 2003).

Efficient and effective service provision has always been an important function of any business capability regardless of whether it is commercially or governmentally oriented. Vargo and Lusch (2004) defined service as "*the application of specialised competences (knowledge and skills) through deeds, processes, and performances for the benefit of another entity*" (p.2). To achieve this degree of competence requires skilled and knowledgeable management who are aware of their own and others learning needs and capacity. These managers must have a holistic, service-oriented view of their organisation to deliver service outcomes (Bitner, 2001; McKenna, 2002).

The online, multi-channel organisation needs to learn how to best serve its current and future service needs. For the customer facing systems in this research, the overall organisational system that operationalizes the needs of the different stakeholder and management groups needs is the service delivery system (SDS) (Gronroos, 2007).

The next section clarifies the service delivery systems in terms of this research.

1.1.1 The Service Delivery System (SDS)

Online multiple service delivery channels provide service oriented public organisations with new opportunities to deliver services better, faster, and cheaper. This is in line with contemporary government policy and recent calls for smaller and cost-contained government (Treasury, 2011). However, the increased

complexity involved in multi-channel service configuration presents challenging new systems management and implementation issues (Sousa & Voss, 2006).

SDSs are defined and operationalised by these managers and their associated service delivery teams. How these managers cope with the organisational learning required to envision and communicate the evolution of those systems is under-represented in the current services literature (Tate, et al., 2006).

SDS configurations permeate the organisation and frequently challenge traditional organisational boundaries (Davenport, 2000; Gronroos, 2007; Hallett & Ventresca, 2006). Defining and implementing a successful SDS is a persistent organisational challenge only made more difficult in the multi-channel organisation by the need to integrate the diverse needs of both online and physical channels (Sousa & Voss, 2006).

1.1.2 Multiple channel service delivery

Service delivery mechanisms that integrate the traditional physical channel service delivery with virtual channel options form the PSO multi-channel service delivery system (Sousa & Voss, 2006). Managing service information becomes complex and channel specific information management strategies become necessary. Systems in this setting are subject to constant change, and system boundaries are difficult to identify (Sousa & Voss, 2006; Tate, et al., 2006; Zeithaml, Parasuraman, & Malhotra, 2002).

In the face of that multi-channel complexity, the nature of the service exchange is fundamentally changed (Parasuraman, Zeithaml, & Malhotra, 2005). The service agent and the customer no longer synchronously co-create service value in the same way as when they met face to face. Managers of multi-channel service delivery systems must develop new ways of thinking about their service delivery processes and how they understand and create service value (Gronroos, 2008).

This complex setting raises questions about how managers and implementers of service delivery systems learn from customer feedback and from each other and how they go on to act on that learning in ways that promote the evolution of successful multi-channel service delivery systems.

Parasuraman (2004) reiterated the importance that frontline service agents play in closing of the service-performance gap. For example, in the case of a customer service website, the service agent may be the content editor, the web site designer, or a customer service representative who acts on the information recovered from the customer via the website.

Much of the existing literature and research into multi-channel service delivery is drawn from commercially oriented organisational contexts. New Zealand Public sector organisations have been engaging in e-Government related multi-channel service delivery initiatives that represent a new context against which some of the existing multi-channel service delivery knowledge can usefully be compared and built upon.

1.1.3 New Zealand public sector organisations

New Zealand public sector organisations (PSOs) deliver services to and on-behalf of citizens. The consequences for managers and public reputation of these organisations getting their service delivery systems wrong are considerable if they experience service failures. Recent New Zealand examples of service systems failures include the contribution to the leaky-building scandal of local government process failures (Parliamentary-Library, 2002) and identity thefts by foreign governments breaching passport controls (NZPA, 2005). Effective management and configuration of these service delivery systems frequently falls to mid-level (tier four or five) managers and their associated service delivery teams.

1.1.4 Managers of service delivery systems

New Zealand public sector managers have been implementing increasingly complex service delivery systems to meet their service obligations, frequently with incomplete and rapidly changing information (Lips, Eppel, Cunningham, & Hopkins-Burns, 2010). The statically configured public bureaucracy of the 20th century has given way to organisations made up of dynamic network organisational configurations and agile corporate-style management models (Dunleavy & et al., 2006). The management, systems, standards, and processes that are necessary to support public service delivery operate against a backdrop of

rapid change, increased technical complexity, constant political influence, and repeated calls for optimal value-for-money in their service delivery (Considine & Lewis, 2003).

Public sector managers deliver services in a climate that is open to a high degree of public scrutiny. The case for delivering high quality public services affects not just the direct recipient of the service, but, in many cases, the benefits and risks accrue equally to civil society as a whole. It is essential that managers learn and develop the skills to maintain services in a rapidly changing and increasingly complex environment (SSC, 2003).

Public sector managers have a constant need to learn about what is required for high quality service delivery. Understanding just what multichannel service delivery means for these managers presents a series of challenges unique to public sector management such as dealing with non-commercially oriented customer relationships as in the case of a citizen-customer paying a fine. This is especially true when multiple stakeholders are being served by a particular service. Stakeholders often have competing interests and agendas. Managers cope with this complex environment by learning about what works and what does not and acting on that learning (Crossan, 2003a).

Producing successful service delivery systems requires a managerial understanding of the social and organisational mechanisms at work behind the multi-channel operational line of visibility. The incomplete nature of this understanding is an area of ongoing commentary in the services research literature (Bitner, 2001; Gronroos, 2007; Sousa & Voss, 2006). Significant scholarly attention has been given to the study of the relationship between the service agent and the customer in both traditional and multichannel services (PZB et al).

1.1.5 Organisational learning

Organisational learning (Argyris, 1977; Argyris & Schon, 1996; Cangelosi & Dill, 1965; Fiol & Lyles, 1985; Senge, 2006; Shrivastava, 1983) goes some of the way towards meeting the managers' needs, but does not necessarily go far enough for the complexity involved in the multichannel public sector service delivery systems setting. Questions then arise about how these public managers and

implementers go about using organisational learning as a result of feedback from the operating environment, the organisation, and from each other.

Organisational learning for multi-channel SDS needs to integrate elements of team learning, knowledge management, and systems thinking (Armistead & Clark, 1993; J. S. Brown & Duguid, 1991; Huber, 1991; Senge, 1990; Stata, 1989). Some approaches to organisational learning focus on individual, team and organisational learning as being largely context neutral (Argyris & Schon, 1996). However, when managers function in an environment such as multi-channel service delivery the systems context and the organisational learning context can become entwined (Vishwanath & Mulvin, 2001). The complexity and organisational learning challenges increase even more when services are delivered by service agents using combinations of face to face and technology mediated channels.

Organisational learning is defined by Argyris and Schön (1996, p.16) in the following way: *"Organisational learning occurs when individuals within an organisation experience a problematic situation and inquire into it on the organisation's behalf"*. The process of systems development requires an on-going commitment to learning about service capacity on behalf of the organisation by managers, designers, and implementers of systems.

Organisational learning has emerged in recent decades as a means of identifying, explaining and effecting change in organisations by scrutinising the learning that is occurring at the individual, group, and organisation wide levels (Bapuji & Crossan, 2004; Crossan, 2003a, 2003b; Crossan, Maurer, & White, 2011). Organisational learning practice and research has developed a set of common descriptions and techniques that help to put learning of this type into context.

The language of organisational learning provides a useful scaffold for examining the structure and motives of these groups and exposing how organisations value different types of learning (Orlikowski, 2006; Senge, 1990). For example, some organisations value the adaptive learning style that supports coping within

existing structures, whereas others value the generative learning style that is creative and challenges organisational norms.

Organisational learning can also be used to help to understand the nature of change and the introduction of new ideas within groups. This provides a context for understanding creative tension and examining the cultural values of the organisation in terms of collective learning. Moreover, organisational learning provides useful sense making structures for exposing mental models and defensive routines in individuals and groups that potentially block original thought.

This research examines the organisational learning perspectives and experiences of twenty nine managers across six New Zealand PSOs and explores how their learning in operationalising their service delivery systems relates to what established organisational learning theory suggests.

1.2 Research Motivation

This research is motivated by a desire to explore new ways of thinking that may arise about organisational learning in the multi-channel setting due to the public sector that in turn leads to exploring a suitable model for situating organisational learning in the multi-channel public sector service delivery setting.

In addition the multi-channel setting in public sector organisations is an intrinsically messy environment where overlapping motives, complicated stakeholder interests, political influences and the ultimate service objectives create an operational domain that is fundamentally different from that which would be found in a commercially-oriented multi-channel service delivery setting.

1.2.1 The PSO as a special case

Faced with managing these various interests and drivers managers must acquire skills and techniques to effectively deliver services. The ICT mediated multi-channel configuration has increasingly become a non-negotiable service delivery mechanism for most government agencies since the late 1990's (Considine & Lewis, 2003; Treasury, 2011).

Managers within multi-channel PSOs develop an appreciation of how e-government and e-service initiatives can be operationalized. In turn, this leads to a more complete understanding of the multi-channel public service delivery capability of their organisation.

In New Zealand the multi-channel PSO service delivery context is a dynamic environment because of an almost constant state of change that has characterised the NZ public sector in the last two decades. Political contest, variable stakeholder interest that have led to calls for efficiency and effectiveness gains has put managers in a state of needing to understand how and why they deliver the services they do (Boston, Martin, Pallot, & Walsh, 1996; Miller, 2010).

To better explore this special case an exploration is needed into how well managers deal with complexity in their service-related organisational environment. How do they learn about what works and what does not, and how might that learning translate into effective action? In addition, how do they apply that learning in ways that promote successful evolution of service delivery systems?

1.2.2 Services research is topical

Services science is an emergent and topical area of organisational and management inquiry that seeks to evolve an empirical appreciation of how and why service delivery systems are built in the way they are (Barrutia & Gilsanz, 2009).

Information systems research into service-related topics has an important role to play both as a core IS topic and as a reference discipline alongside services marketing and operations management disciplines (Saunders, 2007).

1.2.3 The information systems discipline needs a better understanding of service delivery systems use and implementation

A more complete understanding of service delivery systems is an enduring thread of information systems research (Sylvester, Tate, & Johnstone, 2011). Service delivery systems are social systems just as much as they are process or technological systems (Gronroos, 1984; Parasuraman & Zeithaml, 2001). The

problem domain is more than a database definition or communications protocol issue.

As modern public sector organisations embrace new technologies that incorporate information sharing, social media and communications technologies, the need to appreciate and explain the complex learning and systems thinking that occur in service delivery systems will become even more critical than it is today (Ansari & Mela, 2003; Langdon, 2006; Sousa & Voss, 2006).

There is a lack of a cohesive empirical body of knowledge available for exploring how managers in public sector organisations translate their learning into multi-channel service delivery systems.

There appears to be a poor understanding of the implications associated with the decoupling of service capacity and the service agent that occurs in virtual service delivery channels.

There are few suitable models that explain how the combination of output of organisational learning in the context of public sector organisations translates into systems, processes and incorporate the ICT artifacts that support those organisations and their style of public sector customer.

There is little in the way of empirical evidence that links knowledge transfer mechanisms in public service management with multi-channel service delivery information systems success in public sector organisations.

Multichannel service delivery in E-government is a key approach to providing citizen-customers with service engagement choice as well as providing efficiency and effectiveness gains for the organisation. It does this by providing an information and communication technology infrastructure layer that enables the configuration of a service delivery network that pro-actively delivers services by orchestrating organisational interactions, rather than just providing multiple channels for their own sake (M. Blakemore & F. Wilson, 2009).

Multi-channel service delivery models are more than a loosely coupled set of delivery options. They are an organised network where service objectives and

delivery tasks are shared through formal design and service agents are trained and supported.

The service agents and their service delivery network operate within a coherent governance framework, with clear accountabilities, and where the agents involved work towards agreed objectives.

This leads to a research motivation to understand how multi-channel e-government adoption has created new learning challenges for PSO managers. This leads to questioning the nature of PSO customers accessing services via these multiple channels from the viewpoint of the PSO managers. In turn, those PSO customers are also a poorly understood and defined concept, they can be variously defined as value deriving customers, citizen customers, as citizen-as-governor customers (Alford, 2009). In response to the needs of those customers government agencies add more channels to their service configuration so, what are the management challenges for defining and integrating virtual and physical service alternatives? On top of that, what are the managerial responses to the need to learn about service delivery systems that are complex, multi-channel and varied?

1.2.4 Multi-channel service systems in the public service setting are a special case of service delivery.

Multiple channels options are an important characteristic of contemporary public management service configuration. Services in public management have become focused on citizen needs instead of just achieving inputs for organisational processes.

Successive New Zealand governments have taken significant steps towards understand the needs of citizens and groups of citizens. Public sector managers have been charged with designing service offerings that meet the needs of different citizen categories and implementing policy in a way that enables variety and choice in terms of access to services. The citizen-customer has a different kind of information and power gap than their commercially-oriented service delivery counterparts. For example the customer of the taxation systems does not have a commercial parallel (SSC, 2009).

Organisational leadership in the New Zealand public sector has taken an all-of-government approach to improving service delivery, access, and reach. Government sees the use of technology as the innovation of choice to support this vision identified in two strategic result areas for the New Zealand public sector (SSC, 2012):

Result Area 9: *New Zealand businesses have a one-stop online shop for all government advice and support they need to run and grow their business. Target: Government services to business will have similar key performance ratings as leading private sector firms by July 2017, and businesses will be able to contribute to this through an online feedback system from July 2013.*

Result Area 10: *New Zealanders can complete their transactions with the Government easily in a digital environment. Target: By 2017, an average of 70 per cent of New Zealanders' most common transactions with government will be completed in a digital environment – up from 24 per cent currently.*

In delivering to these targets managers are also presented with the need to choose which channels will be added, dropped or ignored. In connection with those decisions managers also have to decide which services are suitable for one or more channels and what impact those choices have on service delivery costs and quality from a stakeholder and citizen-customer perspective. This leads to managers having to evaluate and make technology choices that can affect the latent demand. Latent demand can arise as a consequence of deploying a new channel type such as enabling access to public information that was not previously readily accessible.

Electronically mediated multiple virtual channels are constantly evolving: telephone, fax, email, web and recently social media such as Facebook and Twitter. Each time a new means of interaction with government emerges there is a new opportunity to renegotiate what multi-channel service interaction is and what the impact may occur as a result of that interaction.

In addition, multi-channel service delivery requires a different set of organisational capabilities. Managers, analysts and policy makers in a multi-channel environment have to: acquire new skills and understanding of the

technologies involved, understand the information gaps of the citizen-customers, and undertake process design that suits the new ways of working in a citizen centered delivery context. Multi-channel service delivery requires different and changing skills from the delivery managers and agents regardless of whether they are developed internally, purchased, or a combination of both.

In a multichannel service delivery context some virtual channels are used to compliment face-to-face physical service channels while other others compete or disrupt existing channels. Understanding how and why citizen-customers move across channels is recognised as one of the hardest factors to articulate in multi-channel service delivery (Moore & Flynn, 2012).

As a result the emergent service delivery expectations, needs and preferences of well-informed citizen-customers and the rapid proliferation of communication channels requires e-government initiatives to address service delivery through an understanding of the strategic significance of channel decision making including assessing cross-functional impact and benefit realisation over the long term.

In addition, channel economics play an important role in the call for better, faster cheaper government services. Managers looking for savings and efficient back-end channel processes look to multi-channels as a solution. To achieve these gains managers need specific new skills to integrate new channels into their existing channel operational models. This can involve substantial change management and educative efforts to shape customer behaviour and assist customers to shift from a comfortable but inefficient channel to another.

Multi-channel public sector service delivery requires constant management of customer satisfaction, clear articulation of service expectations and an operating environment that recognises multiple service delivery alternatives. For example, policy or legislation changes may flow from, or be required for multi-channel services.

In keeping with their commercial equivalents PSO multi-channel service deliver still has to maintain consistent content and message across all its delivery channels, encourage information flow and support customer feedback mechanisms in every channel.

Finally, multiple channel government agencies have to be aware of emerging channel options and be open to adopting new channels and abandoning old ones as technology preferences shift.

As a result, the service delivery systems that operate behind a multi-channel setting have to take account complex systems and socio-technological considerations that do not exist in a face-to-face service delivery setting. In particular, some electronically mediated multiple service channels such as the Web-channel introduce an asynchronous communications dimension because in many multi-channel service the service encounter is ‘authored’ separately and ahead of time from the consumption of the service by the citizen customer.

1.3 The Research Question

Based on the discussion above, the study is distilled into the following research question:

To what extent and how does organisational learning influence service delivery information systems in public sector organisations that deliver services across multiple channels?

By addressing this research question, the study seeks to make a new contribution to service delivery information systems research.

The question includes elements of systems thinking and service delivery systems dynamics linked with organisational learning and knowledge transfer in public services. Addressing this question leads to a more developed understanding of the social processes at work when systems are defined, used and maintained by managers in public sector organisations.

Addressing this question also informs future online service delivery systems investigations by providing an improved framework for exploring organisational learning in organisations that use multi-channel service delivery systems for public service delivery.

To address this question it is also necessary to integrate existing organisational learning theory with systems integration theory to help understand how and why systems evolve in the way they do. This will expand the theoretical

understanding of how organisational learning and physical and virtual service delivery channels are designed and operated.

1.4 Research Objectives:

The primary objective is to empirically explore the learning mechanisms that managers use to better understand and explore how they structure their organisational learning to deliver effective services. This will help to discover how service managers use the learning in their organisation's service delivery systems environment.

The secondary objective is to critically examine existing theory that is not typically focused on the case of public sector services with a view to developing a candidate model for integrating information systems knowledge about service delivery systems, organisational learning theory and the unique organisational characteristics of PSOs in the management of service delivery. This examination will lead to a proposed candidate integrated framework for organisational learning in public sector service management that can be used and extended by future research.

1.5 Scope of the research

Service related investigations have traditionally focused on the point of contact between the customer and the service agent as being the nexus of service value for good reasons – that is where customer satisfaction occurs.

The managers that envision implement and maintain the service delivery systems are representative voices for the unit of analysis. The case study unit itself is the service delivery function of the public sector organisation and in-turn these cases are grouped for comparison into dyads. When the service delivery function is mediated by technology and systems the service value is created at a distance. This occurs in the multichannel setting and the customer to service agent relationship becomes decoupled. This decoupling of the customer and the service agent is outside the scope of this research but is acknowledged as a defining characteristic of ICT mediated service delivery. So, for the purposes of this research, the service delivery agent is understood to be the person who the customer regards as responsible for the service encounter. The agent relies on

physical support from the organisational systems and supporting colleagues that are, to all intents and purposes, invisible to the customer below the line of visibility.

Nevis and DiBella et al's (1995) integrated model of normative, developmental and capability focused views of the learning organisation and operationalises that learning with descriptive learning styles. Reviewing the potential usefulness of that approach to organisational learning in the multi-channel context and exploring a means of extending the extant frameworks to encompass the complex systems oriented public sector service delivery context is part of the scope of this study.

1.6 Structure of the thesis

1.7 Conventions

Managers in this research are the managers of service delivery teams or managers with an operational oversight of the systems creation and configuration process.

Leadership means those managers who have responsibility for organisational strategy and overall management of the service function at a senior level, typically, tier one or two managers.

Service delivery systems are the holistic systems that are used to deliver services. This includes but is not restricted to: the technical infrastructure of delivery channels, such as, presentation mechanisms, databases and communications technologies, management and interpersonal communications processes, and the norms and cultural elements of service delivery practices.

While the voice in this thesis is essentially neutral by convention, the researcher is involved in the creation of the understandings presented and is not an impartial observer.

1.8 Limitations and key assumptions

It is understood that the social constructionist paradigm used in this research is not one that supports transferable results. The choice of research sites and the method of interpretation of those results support the notion that these results are not generalisable findings in terms of sample size but rather represent a contextually relevant interpretation that is set in its social and historical context (Klein & Myers, 1999).

However, the managers in this research were typical examples of public service personnel. They worked within a low-corruption environment with effective political and judicial governance, in a Westminster-style democracy. So, it is reasonable to assume that their learning may be relevant to other public managers in similar operational and cultural contexts.

The findings of such a study are generalisable to theoretical propositions that are analytic generalisations rather than using statistical generalization techniques (Yin, 2009). In analytic generalization the generalisations occur from data to theory rather than from sample data to population and the findings are considered to be congruent with or related to prior theory (Huberman & Miles, 1994).

1.9 Vocabulary of this thesis

Multi-channel service delivery involves the offering and provision of services to customers via physical and electronically mediated means (Zeithaml & Bitner, 2000; Zeithaml, et al., 2002).

The Customer Service Encounter is centered on the customer who has a prior expectation of service receiving the service and forming a perception of the relative quality involved in the encounter (Parasuraman, 2004).

The Service Agent is the human actor that interacts with the customer, either in person in the case of a physical channel, or technology-mediated in the case of a virtual channel (Sousa & Voss, 2006).

Service Capacity is the embodiment of latent service performance, competence and organisational culture that underpins the service offer.

Customer relationship management (CRM) concerns the organisations commitment and the actions required to understand and communicate with its customers. It can encompass customer relationship management systems (Jenkinson, 2006).

Line of Visibility is the point in a transaction beyond which a customer does not need to comprehend or engage with the organisational processes (also described as front office/back office) (Bateson & Hoffman, 1999).

Service Delivery Systems are those management operating systems (usually ICT enabled) that enable service actions to be fulfilled (Sousa & Voss, 2006).

Organisational learning is the critical identification of the learning mechanisms at work in within organisational boundaries.

PSO - Public Sector Organisation is an organisation that is funded and operated by the state or under the auspices of governing legislation on behalf of the state. Some PSO's are departments of the government and accountable direct to a minister of the Crown¹. Another type of PSO is a Crown entity which, while they

¹ New Zealand operates a constitutional monarchy (Westminster) system of government, as such; all legislative acts, executive actions of the government and judicial powers are carried out on

frequently have autonomous governance boards but are owned by the government and established under an act of parliament with a responsible minister to whom the governing board reports.

In New Zealand, commercial organisations owned by the government are not PSOs but instead known as State Owned Enterprises (SOE's) and are registered companies. In these cases, there is a shareholding minister.

1.10 Summary

This chapter has introduced the background to the research, the motivation and how the remainder of the thesis is to be presented. In the next chapter the background is developed more fully by reviewing the key literature relating to the research.

behalf of the head of state (currently HRH, Queen Elizabeth). Referred to in practice as: the Crown (in legal terms: a corporation sole).

Chapter 2 Literature Review

The following review integrates the major literatures that have guided this research. The chapter begins with an exploration of organisational learning followed by a short revision of individual learning as it relates to the organisational learning definition.

2.1 Literature review introduction

This chapter identifies the key contributors to organisational learning in recent decades and summarises the key aspects of their work. The normative, developmental and capability perspectives of organisational learning inquiry are identified from the work of DiBella et al, (1998).

This section begins by revising definitions of individual learning before moving on to a broad discussion of organisational learning that identifies the key contributors to organisational learning research and then goes on to discuss the dominant perspectives those contributors have popularised. The discussion then examines the notion of organisations as learning systems and concludes with a working definition of organisational learning that supports the research question from Chapter One.

Figure 1 - Map of the literature review illustrates the structure of this chapter and the unpacking of aspects of service delivery systems involved in this research. It situates the unique contextual element multi-channel service delivery creates, and the situational characteristics arising from managing multi-channel service delivery in multi-channel public sector organisations.

Figure 1 - Map of the literature review

2.2 Organisational Learning Introduction

Organisational learning has been of interest to business management scholars since at least the mid 1960's (Argyris, 1986; Crossan, Lane, & White, 1999; Nevis, et al., 1995; Schein, 1992; Weick, 1991). Early studies such as Cangelosi and Dill's (1965) experimentation into drivers of learning in teams drew on notions of individual learning from related disciplines such as psychology and production management and applied them to the organisational context.

Individual learning and organisational learning are concepts that naturally occur simultaneously but organisational learning does not necessarily occur as a consequence of individual learning. There are many situations when individuals in an organisation learn and build new capability, only to subsequently leave the organisation and take the accrued learning with them. Similarly, there are situations when some individuals fail to take up learning that is an embedded norm of the organisation. This review includes a short review of individual learning in order to be clear about the distinction between the two.

2.3 Organisational learning

In the following section, the major contributors to organisational learning over the last fifty years are reviewed; this list does not attempt to be exhaustive, but instead, it illustrates the depth that intellectual inquiry into organisational learning has taken in recent decades.

2.3.1 *Major contributors to the study of organisational learning*

Chris Argyris and Donald Schön are credited as the creators of some of the core concepts used in contemporary organisational learning theory (Bapuji & Crossan, 2004; Crossan, 2003b; Huber, 1991; Nevis, et al., 1995; Senge, 1990). From 1974 they built on the initial efforts of **Cangelosi and Dill** less than a decade earlier (Cangelosi & Dill, 1965). They extended those efforts by seeking to understand what conditions might be necessary for successful organisational learning to occur (Crossan, et al., 2011).

Their pioneering work on understanding how individuals form mental models as internal representations of a system to use as a sense-making strategy (Argyris & Schon, 1996; Crossan, et al., 2011).

In addition, Argyris and Schön (1996) used the idea of an espoused theory versus a theory-in-use to explain how mental models can be helpful or counter-productive. Individuals and groups often have an ‘espoused theory’ that they articulated when asked how they would respond to a situation. However, in practice the actions of individuals and groups are frequently in conflict with that espoused theory and instead they revert to their theory-in-use to drive their actions. (Argyris & Schon, 1996; Senge, 2006).

This contribution to theory informs this research by explaining why some service managers may offer explanations for service actions that are seemingly at odds with service practices.

Peter Senge’s seminal book *The Fifth discipline* (2006) has become the “handbook” for many organisational learning practitioners and scholars. Senge comes from the perspective that human values are the essence of workplace dynamics and that organisational learning is the amalgam of five disciplines: (i) personal mastery, (ii) mental models, (iii) a shared vision, (iv) team learning, and (v) systems thinking that is an integration of the previous four. He has gone on to author and co-author handbooks, guides and presentations on organisational learning.

Huber (1991) summarised the field of organisational learning as he saw it in 1991 and concluded that there were four key constructs: knowledge acquisition, information distribution, information interpretation, and organisational memory at work across organisational learning research. His review suggests that at that time there were a number of non-convergent branches of organisational learning inquiry. As a result, he called for a more integrated and empirical approach to the study of organisational learning.

David Garvin has integrated knowledge sharing, quality management, learning from mistakes, and holistic thinking into the organisational learning debate (Garvin, 1993). His approach focuses on taking the existing constructs to propose

an organisational learning definition using a set of guiding principles for practice based on three 'M's: meaning, management, and measurement (ibid).

Nevis, DiBella and Gould (1995) made substantial contributions to the organisational learning literature by taking an integrative and diagnostic approach to organisational learning. By building on the work of Argyris, Senge, Garvin and others they condensed the major directions of organisational learning into a set of seven learning orientations ten diagnostic factors. (Argyris & Schon, 1996; DiBella & Nevis, 1998; Easterby-Smith & Lyles, 2003; Garvin, 1993; Nevis, et al., 1995; Senge, 1990, 2004).

2.3.2 *The learning organisation*

An organisation is not a uniform or consistent whole; rather, each organisation is a discrete entity based on its industry type, function, culture and the nature of its sub-units and its state at any given point in time.

The concept of a learning organisation implies a model organisation that displays: (i) the learning ideals required for organisational learning to take place, (ii) an ability to respond to changes in its environment, and (iii) the capability to changing its behavior based on its experience. The organisation is made up of individuals, teams, business units and a myriad of functional configurations. Learning occurs within and across all component parts but like any system the learning function need to be viewed through the actions of those parts (Crossan, 2003b; Nevis, et al., 1995; Senge, 1990).

Organisational learning does not have to occur at a given level or time in the organisation. It can occur as a result of individual, team, or whole organisation learning. Organisational learning can equally be adaptation to solve a problem, assumption sharing, knowledge transfer, or institutionalised experience (Shrivastava, 1983).

2.4 Individual Learning

Organisational learning scholars have used a variety of interpretations to describe what makes up individual learning and to explain its relevance to organisational learning (Argyris & Schon, 1996; Crossan, 2003a; Crossan, et al., 2011; Easterby-

Smith & Lyles, 2003; Senge, 1990, 2004). Broadly, organisational learning scholars view individual learning in terms of adapting rules, goals and searching strategies and broadly describe learning occurring in organisations as an aggregation of individual learning processes (ibid).

There are many definitions of learning at the individual level arising from substantial bodies of literature such as education and psychology. In those disciplines scholars have moved through many models of individual learning such as the stimulus-response model of behavior, the strengthening and weakening of ties (Shrivastava citing Postman et al) and information processing for problem solving on their way to determining a workable definition of individual learning (Shrivastava, 1983; Weick, 1991).

For example, Shrivastava (1983) summarised individual learning in the organisational setting in terms of addressing problems, imbalances or difficulties faced by individuals and applying that learning to the organisation.

In contrast, Senge (2006) asserts that: *“individual learning, at some level, is irrelevant for organisational learning. Individuals learn all the time and yet there is no organisational learning. But, if teams learn, they become a microcosm for learning throughout the organisation.”* By saying this, he is suggesting that individual learning on its own is insufficient for organisational learning to occur and that the team’s learning is more than the sum of the individuals’ learning.

Brown & Duguid (1991) recognised that when the culture or norms of the organisation go beyond explicit and formally defined job functions the learner becomes a part of a community and shares “insider stories” about what it means to be part of the organisation’s social context.

Organisational learning shares many of its roots with the psychology of individual learning. However, there are some essential differences between the psychology and the organisational learning views of individual learning. Early psychology research regarded individual learning in terms of stimulation and response (S-R) - A changed response to the same stimulus represented learning in organisms. In organisational dynamics, the response to stimulus can be quite different – organisational learning can be said to occur when the organisation develops

routines that give consistent responses to different stimuli as is displayed in quality management's continuous improvement cycles (Weick, 1991).

Conceptualising individual learning in this way is helpful for exploring the organisational learning amongst PSO service delivery managers in this research (Huber, 1991; Murray, 2002; Orlikowski, 2006). It helps the researcher to understand to what extent individual learning is being used:

- (i) as a means for addressing organisational problems that scale to the team and organisation
- (ii) for explaining how learning processes transfer within service delivery teams.
- (iii) to create an inherent learning capability in the organisation that exposes entrenched values,
- (iv) to understand to what extent individual learning is being used to influence strategic thinking.

Conceptualising individual learning using the definitions above helps this research by situating individual learning as part of the organisational learning context. When organisational learning is enacted it is achieved by initiating changes within cultures, teams and individuals. Defining individual learning opens the way to the following discussion on thinking about organisational learning as: a problem to be solved, a developmental process or, an amalgam of both.

2.5 Organisational learning perspectives

There has been substantial discussion, inquiry and research on organisation learning in the last four decades (Crossan, 2003b; Senge, 2004; Weick, 1991). Not all of this body of knowledge has pursued the same objectives or completely agreed on what organisational learning is or should be. This discordance has led to a variety of interpretations and operationalising efforts (Crossan, 2003a).

2.5.1 Introduction to three perspectives of organisational learning

Nevis et al (1995) distilled the current approaches into three complimentary and fundamentally different schools of inquiry: normative, developmental and

capability perspectives. Each approach has its proponents and diagnostic strengths and weaknesses. Nevis (1995) took an integrated approach that synthesised the three perspectives into a framework that viewed organisational learning as an integrated learning system that is used as the initial framework for inquiry in this research.

Their work was focused on establishing organisation-level learning styles rather than exploring the learning processes involved in a multi-channel service delivery setting. As a result Nevis et al's (ibid) approach was a useful starting point but requires further exploration to establish its usefulness when multiple delivery channels, the public sector context, and service quality objectives are included.

2.5.2 The normative perspective

The approach to organisational learning that takes a normative viewpoint fosters learning as a means of achieving an organisational goal. It focuses on leadership as a mechanism for setting the tone, communicating a shared vision, and a means for enabling supporting processes and systems.

The normative perspective seeks to identify pre-conditions and seeks clarity around the present and future state of the organisation (Huber, 1991; Senge, 1990). It seeks to measure and prioritize gaps, and decide on suitable interventions that support a defined goal. This approach sees organisational learning as something that can be applied to the organisation in a prescriptive manner to address a shortcoming. An advocate of normative approach is Peter Senge and his five disciplines approach discussed in the next section (DiBella & Nevis, 1998; Nevis, et al., 1995).

2.5.2.1 Senge's five disciplines model

Senge is a good example of a proponent of the normative perspective of organisational learning (Senge, 2004, 2006). The following discussion summarises Senge's five disciplines: Personal Mastery, Mental Models, Shared Vision, Team Learning, and Systems Thinking that integrates the first four disciplines.

Personal mastery – Senge also saw the need to situate individual learning in organisational learning. He did this by using the construct ‘Personal Mastery’ is the discipline of incrementally clarifying and expanding a personal vision, using focused energies, having patience, seeing an objective reality. Personal mastery starts with the individual and clarifying what really matters in a person’s personal skills repertoire (ibid).

Mental models – is the discipline focused on identifying the ingrained assumptions, generalisations, and images that influence how an individual views the world and actions they take based on that viewpoint. It is the discipline of using mental models by “*turning the mirror inward – p.8*”; discovering internal pictures of the world and viewing them critically (Senge, 2006).

Shared vision – builds a shared model of the future aimed at creating personal commitment across the organisation. It involves identifying some future state of the organisation in a way that fosters genuine commitment to the way forward rather than just compliance with corporate directives (Senge, 2006).

Team learning - uses dialogue in teams; it values suspended assumptions in a group and uses authentic thinking that is shared with the group. The discipline starts with the dialogue within a team to suspend assumptions and enter into genuine thinking together. Senge views teams as the fundamental learning unit in modern organisations. “*Unless teams can learn, the organisation cannot learn.*” (Senge, 2006)

Systems thinking – is the integration of Senge’s first four disciplines. Senge asserts that systems’ thinking makes it possible to understand subtle aspects of the learning organisation. He sees systems thinking as a means to create a fundamental shift of mind from individuals viewing themselves as separate from the world to being connected to it. This is so that people can see how their actions can be the cause of the problems they experience. That is, Senge sees a learning organisation as a place where people are discovering how they create their own reality and learning that they have the ability to change it (Senge, 2006).

2.5.2.2 Garvin's building blocks approach

Another take on the normative perspective comes from David Garvin (1983, 1993). Garvin asserts that certain 'building blocks' or specific skill sets are necessary for organisational learning to occur. His prescription has four building blocks: Systematic problem solving, Experimentation, Learning from Past Experience, and Learning from others.

Systematic problem solving – this building block draws on the principles of quality management that will be reviewed more fully later in this chapter. It uses the statistics, testing, cause-effect analysis and other scientific methods to communicate accuracy in understanding problems based on factual analysis rather than intuition or accepted wisdom. It relies on individuals having a critical view of activities and asking "how do we know that is true?" (ibid).

Experimentation – systematically tests new knowledge and is tolerant of small mistakes as part of learning. In this building block, Garvin suggests that learning organisations have to move beyond problem solving and explore new opportunities and ways of looking at what they do by conducting small experiments that result in incremental gains in knowledge (ibid).

Learning from past experiences – in this building block the emphasis becomes making sure that past failures are not repeated through lack of knowledge and awareness. The idea is to use corporate memory to avoid having to re-learn the same lessons when employees leave or the organisation reorganises (ibid).

Learning from others – looks outside the immediate environment for practices and benchmarks that define what works and what does not without having to discover everything anew (ibid).

2.5.2.3 Conclusion about the normative perspective

These frameworks have illustrated how the normative perspective of organisational learning can be used for symptomatic problem solving. The normative perspective assumes there is a learning leadership problem to be solved and the tools and techniques associated with it are aimed at being helpful for diagnosing and solving management problems associated with organisational learning.

The service managers in this research may well perceive their organisation as having an organisational learning management problem that needs to be addressed in this way. On the other hand, they may not; they may instead regard organisational learning as a business-as-usual activity that needs a structure to guide it. These concepts are considered in next section where the developmental perspective is examined.

The normative perspective of organisational learning is useful if there is a problem to be solved. However, for this research, the objective is to explore organisational learning in the New Zealand PSO setting and not to fix a problem. So, while the normative approach is a good start, it is not a complete enough view of organisational learning for the purposes of this research. In the next section the developmental perspective is added to the mix.

2.5.3 The developmental perspective

In the developmental perspective, is that organisational learning is a process that has to be worked through and has predictable stages to pass through that applies to the team or organisation. This contrasts with the normative view that views organisational learning as a means for addressing a learning problem.

The developmental approach is predicated on the idea that organisational learning occurs in a series of predictable stages. This perspective views organisational learning as a systemic issue that can be addressed by viewing learning taking place and enacting interventions across the organisation to effect a change in learning behavior.

The underlying assumption therefore is that the organisation's learning capacity and ability to learn are the problems waiting to be solved. Based on that assumption, a developmental approach favors techniques and language such as: diagnosis, assessment, and intervention to measure the progress of growing organisational learning capability through predictable developmental stages (Nevis, et al., 1995; Weick, 1991).

This approach does however acknowledge that different parts of the organisation might be at different stages in the learning process but asserts that they are all

moving through the stages (Dechant, Marsick, & Kasl, 2000; Weick, 1991). The implication is that organisational learning is something that can be imparted through applied leadership.

An example of one of the scholars who support the developmental perspective is Karl E. Weick (1991, 2002). He used an example of learning from a crisis (the toxic gas leaks at the Union Carbide factory in Bhopal, India) to illustrate how sense-making and enactment have to progress through identifiable stages to eventually enable appropriate organisational responses.

Dechant, Marsick and Kasl's (Dechant, et al., 2000) systems model in: *Figure 2 - Management of learning in an organisation framework* below illustrates the developmental perspective:

Fig. 1. A Framework for Viewing the Management of Learning in an Organization
(Adapted from Kasl, Marsick & Dechant, 1997).

Figure 2 - Management of learning in an organisation framework

Argyris and Schön is possibly the most comprehensive approach to building capability of learning in organisations using the developmental perspective. While their approach is largely non-prescriptive it does promote the use of interventions to support reflective practice (Argyris, 1994; Crossan, 2003b; Crossan, et al., 2011; Nevis, et al., 1995).

The Argyris and Schön (1978) view suggests that people act according to mental maps that guide how they plan, implement and review their actions in certain

situations. They asserted that these maps guide people's actions rather than what they espouse they would do; people are largely unaware of the maps or theories they do use. When someone is asked how he would behave in a particular situation, the answer given is the espoused theory of action for that situation. However, the theory that governs what they actually do in the situation is the theory-in-use (Argyris, 1994; Argyris & Schon, 1996).

They describe theory-in-use as comprising of:

Governing variables - the dimensions people are trying to keep within acceptable limits.

Action strategies - the actions people use to keep their governing variables within acceptable bounds.

Consequences – the intended and unintended results of the action for an individual and for others.

When the consequences of the strategy used achieve what the person wanted, then the theory-in-use is confirmed. However, when there is a mismatch between the intention and outcome, the consequences may be unintended and they may work against, the person's governing values.

Argyris and Schön (1996) proposed two possible responses to that mismatch, the single and double-loop learning that will be discussed below. Their approach has been to explore a prescriptive way in which organisations can increase their capacity for double-loop learning. They argue that double-loop learning is required for organisations to make informed decisions (Argyris, 1991).

Argyris and Schön (1978) had previously operationalised single loop learning as: *“members of the organisation respond to changes in the internal and external environment of the organisation by detecting errors which they then correct so as to maintain the central features of theory-in-use”* (p.18). Whereas, they operationalise double-loop learning as: *“those sorts of organisational inquiry which resolve incompatible organisational norms by setting new priorities and weightings of norms, or by restructuring the norms themselves together with associated strategies and assumptions”* (p.24).

They went on to propose two prescriptive models to describe features of theories-in-use that either inhibit or encourage double-loop learning Model I - inhibits double-loop learning and Model II enhances double-loop learning (Argyris & Schon, 1996).

Model I involves making inferences about behavior without validation and supportive reasoning. Theories-in-use are shaped by a predisposition to winning and avoiding embarrassment. Model I behaviors lead to entrenched defensive routines by managers (ibid).

The Model II prescription includes good quality data and inferences. Model II sets out to include the views and experiences of participants rather than seeking to impose a viewpoint or intervention that emphasises common goals and mutual influence.

Argyris (ibid) looks to move people from a Model I to a Model II orientation and practice – one that fosters double-loop learning. He suggests that most people, when asked, will espouse Model II. In order to apply these models he proposes a prescriptive sequence of interventions that moves through six incremental phases:

Phase 1	Mapping the problem. Factors and relationships that define the problem and the relationship with the living systems of the organisation.
Phase 2	The internalisation of the map. Through inquiry and confrontation to develop a map participants can accept responsibility for.
Phase 3	Test the model. Looks at what ‘testable predictions’ can be derived from the map – and looks to practice and history to see if the predictions stand up.
Phase 4	Invent solutions to the problem and simulate them to explore their possible impact.
Phase 5	Produce the intervention.

Phase 6 **Study the impact.** Allows for the correction of errors and generating of knowledge for future designs.

Argyris and Schön (ibid) also describe individual learning in terms of the single and double loop perspective as being essential to creating a learning capability. To them, learning involves the detection and correction of errors. They assert that when something goes wrong people look for a different approach with single loop learning that will solve the problem and work within their governing variables. The alternative is to use a double loop approach by critically question the governing variables and address why they are the way they are.

They liken single-loop learning to a room thermostat that responds when information about a room is received that the room is too hot or too cold and takes corrective action to turn the heat on or off (Crossan, 2003b).

In contrast, double-loop learning occurs when questions are raised about the organisations underlying norms, policies and goals, behavior not normally attributed to thermostats. Using the analogy above, double loop learning questions the need for a thermostat at all, or asks if there is an alternative approach to the problem of temperature regulation.

2.5.3.1 Conclusion of the developmental perspective as related to services

The development perspective is also a useful contributor to understanding the behaviour and attitudes of service managers. The strategies outlined above can be used to explain how and why organisational learning takes place more effectively in some settings than others.

However it does not bring together the potentially useful elements in the normative perspective. To achieve this requires an additional perspective aimed at integrating the best of the preceding approaches. The next section looks at the capability perspective of organisational learning that achieves this integration.

2.5.4 The capability perspective

The capability-based approach to organisational learning assumes that organisations learn naturally in response to environmental changes. It does not favor one particular style of learning over another. The learning is seen to take place through discovery, affirmations of good practice, and recognising successful learning patterns. The approach does not favor intervention but instead uses the “journey of discovery” metaphor to promote learning as a cultural norm (Nevis, et al., 1995). In the capability perspective the emphasis shifts to culture as the container for organisational learning and competence becomes the expression of that learning (ibid).

The capability perspective is useful in this research because it offers insights into the organisational learning context of an organisation without needing to address a ‘problem’ in the way that the normative and developmental perspectives do.

The capability perspective is not, however, a ‘do nothing’ approach. It integrates the previous perspectives but acknowledges that the organisational learning is a cultural and social phenomenon within the organisation and that the actions of organisational learning take place in that context, some of which are motivated by problems. This approach is consistent with the methodological stance discussed in the research method chapter.

Five aspects of the capability perspective are discussed and expanded below:

- (i) Core competency
- (ii) Adaptation
- (iii) Communities of practice
- (iv) Knowledge transfer
- (v) Knowledge management

2.5.4.1 Core competencies aspect of capability

The first aspect is drawn from Schein (1992) who proposed three core competencies: the executive, the engineer and the operator to illustrate how individual competence is influenced by cultural norms originating within and outside the organisation. He asserts that organisations are not capable of learning effectively until they can acknowledge that these different cultures have valid but substantially different expectations of the organisation. He suggests that the key

to organisational learning rests with these groups acquiring the skills and knowledge to self-analyze their cultures and use that analysis to help others understand their needs and expectations.

Core competencies inform this research by providing a means to situate manager's attitudes to organisational learning. Service managers who view themselves in the different ways of core competencies will have differing expectations on the organisational learning needs of their service teams.

2.5.4.2 Adaptation aspect of capability

In contrast, a second example is drawn from Brown and Duguid (1991) who take an adaptation viewpoint and assert that the groups that Schein talks about exist; but that they are part of a more complex social network that forms a community or "community of communities".

Each community has its own practices and understanding of what learning is and how it should be enacted. They identify three influential attributes of these communities each of which requires a different approach to learning: (i) that working is an individual task that an individual is accountable for, (ii) that groups are organised by responsibility and (iii) that organisations are bounded to enhance ideas of competition.

From this viewpoint they suggest that the social context of these attributes such as the social relationships, shared history and other relationships of the people involved all converge to influence organisational learning (Bitner, Brown, & Meuter, 2000; J. S. Brown & Duguid, 1991; S. W. Brown & Bitner, 2006).

This aspect also informs the research because service functions rarely, if ever, operate in isolation. The service managers and teams in this research are themselves part of a complex social hierarchy and subject to social and political influences.

2.5.4.3 Communities of practice aspect of capability

The third example of the capability perspective comes from Wenger (2000) who uses a communities of practice viewpoint to suggest seven characteristics for organisational learning to occur:

- (i) **That learning is inherent in human nature** – from this he suggests that while learning is always there what makes it productive for the organisation is not necessarily apparent.
- (ii) **That learning is a social activity** – he asserts that learning is a social activity in the workplace. For example, the apprenticeship process has social norms and rules.
- (iii) **Learning changes who we are** – such learning enables us to adapt to changed circumstances and identify with a new ‘normal’. For example, learning about health can lead to adopting a healthy lifestyle.
- (iv) **Learning is engagement in practice** – being a member of a community means adopting its practices and learning what they mean and becoming part of the community.
- (v) **Learning reflects participation in a community** – that learning in a community has protocols and expectations that define its practice.
- (vi) **Learning means dealing with boundaries** – when learning takes place in a community of practice new boundaries and expectations arise that are not the same boundaries that exist within the organisation.

Again, this research is helped by this aspect because it situates organisational learning as a critical component of the social fabric of any organisation’s functional makeup.

2.5.4.4 Knowledge Transfer aspect of capability

This research is informed by the knowledge transfer aspect because for organisational learning to be effective beyond the immediate generation of service delivery managers and teams there must be a well embedded means of retaining and transferring systems and organisational knowledge.

Knowledge transfer is a fourth aspect of the capability perspective. To explore knowledge transfer at the service delivery team level three well developed and interrelated patterns within the knowledge management continuum are explored in some further depth, they are: tacit-explicit knowledge, the SECI model, and the Ba concept. The following sections explore each of the four patterns.

Knowledge transfer casts a wider net than training because it embraces the formal and informal processes and mechanisms that assist knowledge propagating within the organisation's boundaries over: time, geography, and within the organisations social systems.

Tacit-explicit knowledge management

Polanyi (1967) proposed two dimensions of knowledge, tacit and explicit to explain the difference between knowledge that can be codified and transmitted without loss of meaning – the explicit and that which requires experience, cognizance, and intangible expressions – the tacit.

Explicit knowledge in a service delivery system is typically manifested through information artifacts such as procedural documentation, formalised work processes, and performance standards. Tacit knowledge is less straightforward to observe because it involves aspects of cognition and technical application (Davenport & Prusak, 1998).

Mental models are an example of tacit knowledge being used by people to make sense of activities and situations by creating and sharing models of how the world and systems work in their situation. These models and analogies are highly contextual and cannot be readily separated from the situation to which they apply (Johnson-Laird, 1983).

The research is informed by this concept because when service delivery systems are operationalised, managers must decide to what extent they are able to codify the explicit knowledge of the organisation and to what extent that must rely on other less structured knowledge transfer mechanisms.

The SECI model of knowledge management

Another aspect of capability is drawn from Nonaka et al (2000) who expanded understanding of the relationship between tacit and explicit knowledge by proposing an explanatory model that suggests knowledge can be thought of as an iterative and incremental spiral moving through four distinct knowledge conversion phases: socialisation – the tacit to tacit conversion, externalisation –

the tacit to explicit, combination – the explicit to explicit, and internalisation – the explicit to tacit.

These are useful notions to help explain aspects of organisational learning in public sector service delivery because the spiral implies that the process of moving between these stages creates a growth in knowledge as experience is accumulated. This aspect is especially helpful for exploring those aspects of service delivery management that relates to the formation and communication of mental models in service delivery performance.

This section has shown how the capability perspective acknowledges the socially constructed dimensions of learning and asserts that learning is something that is going on all the time and can be encouraged and nurtured or suppressed and inhibited.

This will inform the research lens by providing explanatory mechanisms when the researcher is seeking to understand how and why the service managers in the research have made the decisions they have about the structure of their organisational learning.

2.5.4.5 Capability perspective section conclusion

This concludes the discussion of the developmental perspective and its components. Like the normative perspective it is useful for exploring organisational learning. However, it is predicated on the assumption that organisations will follow the organisational learning pattern and that there is one or some interventions for every situation.

This research is exploring organisational learning that may be occurring or it may not. If it is, it might be unconventional and hard to categorize. As a result, yet another viewpoint of organisational learning is required. So, without discarding the normative or the developmental perspectives, the integrated, capability perspective is discussed in the next section.

2.6 Organisations as integrated (capability) perspective of organisational learning systems

The organisational learning processes described so far are useful for analysing the organisational learning that occurs within organisations generally and when an organisational learning diagnosis is required. Nevis, DiBella and Gould (1995) offer an integrated two part model based on empirical studies carried out with major corporate organisations. They describe a capability perspective of organisational learning system as being represented by seven learning orientations and ten facilitating factors that folds the ideas from the normative and developmental perspective into a holistic model.

This framework provides a useful and empirically grounded starting point for evaluating organisational learning capability. The initial learning orientations part of the model aims to describe how choices about learning in organisations are made. The dimensions used are not binary choices but instead represent poles on a continuum.

In the second part of the model, Nevis et al. (1995) focus on the ten factors that they suggest represents expedited organisational learning. These factors examine the structures and processes that need to be in place for learning to occur.

2.6.1 The integrated organisational learning framework

DiBella and Nevis's (1998) approach provided popular² pragmatic advice about using development of organisational learning capacity drawing on existing organisational theory from Garvin, Agyris, Schön and Senge (already introduced) as a starting point. This approach was consistent with the norms of organisational theorists who have a strong tradition of linking action research activity to practice.

They articulate the necessary characteristics of organisational learning in order to clarify the distinction between individual and organisational learning using three criteria: first, the new skills, attitudes, values and behaviours that are created or acquired by the organisation (as opposed to individual values and behaviours that

² . A June 2012 Scopus citation check on the book revealed 2,732 references (1500 of those within the last four years).

accrue over time). Second, that what is learnt becomes the property of some identifiable collective unit. Third, that learning remains as part of the organisation or group even when membership changes.

At the centre of their approach is a set of tools for measuring and evaluating organisational learning. Of particular interest to this research are two aspects of the framework, firstly the seven learning orientations identified to facilitate identifying how learning is occurring and identifying and describing organisational learning style and secondly the ten facilitating factors aimed at identifying enablers and barriers to learning in organisations and can be changed in order to enhance future organisational learning capacity (See Figure 3, p.52).

The organisational learning framework is targeted at helping organizations learn in ways that makes sense for the people who work in those organisations and for the society they impact upon. It elegantly integrates a research base, a research tool, and provides guidance on interventions managers could use.

Learning orientations	Facilitating factors
1. Knowledge source focus	1. Scanning imperative
2. Product or process focus	2. Performance Gap
3. Documentation mode	3. Concern for Measurement
4. Dissemination Mode	4. Experimental Mind-Set
5. Learning Focus	5. Climate of Openness
6. Value-Chain Focus.	6. Continuous Education
7. Skill Development Focus	7. Operational Variety
	8. Multiple Advocates
	9. Involved Leadership
	10. Systems Perspective

Figure 3 - DiBella and Nevis - Integrated Framework of Organisational Learning³

The framework was based on detailed research carried out in seven large American and European private sector corporations. DiBella and Nevis set out to understand how and why those organisations learned as well as drawing on

³ Expanded and detailed in section 3.5

research done across 25 Fortune 500 companies through the late 80's and into the early 1990's for the purpose of development and validation of their methodologies. A potential limitation of this framework is that by drawing and relying mainly on European and American large private sector corporate settings for authority important learning styles from other cultural settings. For example, unique aspects of the public sector and e-government context could be overlooked. As another example, it potentially misses some of the important contributions to quality and knowledge management from Japanese organisational research.

The approach leads to a model of organisational learning as a continuous process that draws on experiential learning models from Kolb and from continuous quality improvement processes emphasising the importance of involved leadership and developing exemplars for how learning should be operationalised within the organisation. This is consistent with service quality circles of workers advocated by experts such as Deming, Juran, and Feigenbaum whose work advocated for quality circles (Ferguson-Amores, García-Rodríguez, & Ruiz-Navarro, 2005). That work focused on organisational communications devices that surfaced issues and aimed to improve any aspects of workplace, improve management awareness of quality through learning and sought to enhance employee motivation resulting in workers who were involved and heard by the organisation.

DiBella and Nevis also emphasised the three perspectives (normative, developmental and capability-based) and showed that they are mainly complimentary although they do, to some extent, contradict each other. The normative perspective assumes a problem needs solving, the developmental perspective requires learning and reflection on experience and power while the capability perspective requires that the organisations culture aligns with its learning processes. The work of DiBella and Nevis has parallels with seminal works such as Senge's 'Fifth Discipline' (2006) but takes a more impartial diagnostician's viewpoint that could potentially be a weakness by failing to capture some of the more subtle nuances that characterises learning behaviour. Like culture, organisational learning is an abstract concept. Such abstractions

have limits on their usefulness that need to be understood. The learning organisation is an abstraction that can only be taken as far as it is helpful and no more. However, despite that risk, they do introduce and develop an organisational learning model that has successfully linked organisational learning with knowledge creation and acquisition, dissemination and utilisation (or exploitation) in multi-national corporations (DiBella & Nevis, 1998). This research considered the suitability of using the approach advocated by DiBella and Nevis in a public sector service delivery setting.

Other alternative perspectives of organisational learning also exist, such as the radical perspective described by Örténblad (2002). He challenges the way in which writing about learning organisations tends to overstate the positive aspects and consistently down-play the potential for organisational learning to be a drain on organisations. He does this by dividing up the literature about learning organisations using Burrell and Morgan's objectivist/subjectivist viewpoints and calls for a radical theory of organisational learning that considers the role of organisational power relations. His points are consistent with the critical inquiry approach to IS (discussed further in Section 4.4.2). The DiBella and Nevis framework, while not addressing power relations directly, does integrate aspects such as leadership that go some way to meeting the Örténblad criticism. On top of this additional aspects of organisational learning arising that relate to the public sector setting are added to the adapted DiBella and Nevis framework developed in chapter 3 to expand its scope into the multi-channel service delivery context.

Another perspective comes from Owenby (2002) who refers to the 'dark side' of the learning organisation. Like Örténblad, he is concerned that organisational learning studies fail to properly recognise the role of power relations. He challenges the intent of some organisational learning initiatives as being a means of disseminating corporate hegemony and failing to achieve learning empowerment among workers. He questions whether 'organisation' and 'learning' are abstract terms that organisations acknowledge that individuals may learn their collective learning can be integrated to form embedded knowledge and the organisation itself has little to contribute. Again, the integrative abilities of the learning orientations in the DiBella and Nevis

framework should provide a means for mitigating this valid concern. The framework is a way into the empirical inquiry of organisational learning in PSO service delivery and provides a useful tool for developing an open interview protocol based on the framework in chapter 4 and used for the analytical descriptions that follow in subsequent chapters. These steps take the original DiBella and Nevis framework into a different domain of inquiry than its originators intended and move the organisational learning framework into a new research tradition.

2.7 Organisational learning in NZ PSOs – a working definition

After considering the three perspectives of organisational learning in the preceding discussion it is useful to put this into focus. To that end, a synthesised definition to guide this inquiry is proposed as:

“Those learning processes at work among public sector managers and supervisors of service delivery teams that enable the development, maintenance or quality improvement of multi-channel service delivery systems”.

This concludes the discussion about organisations as integrated organisational learning systems. The literature review continues in the next section with a discussion of the role of ICT in service delivery systems.

2.8 The role of ICT in service delivery systems

The following discussion deals with the use of ICT in service delivery from two perspectives: firstly, the business case perspective in services marketing and secondly, from the IT artifact perspective.

From a technology perspective, service delivery ICT artifacts do not fall into tidy categories but instead exists as an amalgam of systems techniques, each with its own systems lifecycle (Orlikowski & Iacono, 2001).

2.8.1 The business case perspective

Information and communications technologies (ICT) used for service delivery are considered critical for customer orientated organisations (Bitner, et al., 2000; Davenport, Harris, & Kohli, 2001; Zeithaml & Bitner, 2000). Companies such as

Dell, Hewlett Packard, and IBM, that once described themselves as manufacturers of 'hard' goods, now openly concede that their physical product sales, although still strategically important, are regarded as gateway devices for selling services (S. W. Brown & Bitner, 2006).

Both the intrinsic services of the physical product and value added services represent substantial ongoing profit streams for these firms. This realignment towards the service component of goods creates the need to reengineer their internal structures and processes, establish new strategic goals, and develop new and deeper relationships with both their traditional and new categories of customer (McKenna, 2002; Rowley, 2006; Rust & Thompson, 2006).

New business models have emerged because of the easy way in which ICT-enabled service delivery can span time zones and international borders. This feature is often used to take advantage of economies of scale, lower cost of off-shore labour, or labour availability because of time-zone differences (Weill & Vitale, 2001).

2.8.2 *The IT artifact perspective*

The IS literature is punctuated by debate about what constitutes an IT artifact and whether such an artifact is even necessary in IS research (Benbasat & Zmud, 2003; Orlikowski, 2006; Orlikowski & Iacono, 2001). Orlikowski and Iacono (2001) uses five viewpoints for considering the IT artifact in IS research. Each of the viewpoints of the framework is summarised briefly below:

- The **tool view** - the technology provides a specific information processing capacity.
- The **proxy view** – the technology is represented by surrogate measures such as acceptance, diffusion, cost etc.
- The **ensemble view** – takes the view that technology is a package of technical, social and organisational parts.
- The **computational view** - takes the view that technological processes are models of, or simulate the tangible world.
- The **nominal view** - invokes the technology indirectly, but not in fact.

Multichannel business and public sector organisations deliver their services by operating primarily through ICT dependent systems and work practices. Multi-channel service delivery implies an ICT-enabled virtual channel. Even a physical channel in the contemporary business and public sector service setting requires underlying ICT systems support and integration with its online counterparts.

Service delivery systems fit to some extent within each of the categories in the typology above. Service delivery systems are made up of: people, processes, knowledge transfer mechanisms, data repositories, and communications media.

This research goes beyond just examining the IT configuration but seeks to understand systems as an inseparable part of the organisation they reside in. In addition, New Zealand PSO service delivery systems are examples of complex hybrid systems. This is because New Zealand PSOs are almost always made up of a number of discrete information and communications systems and technologies (SSC, 2003, 2009).

2.9 Multi-channel service delivery

In the context of multiple channel service delivery, service can take on different forms depending on the number and characteristics of the channels. Sousa and Voss (2006) defines multi-channel service as *"a service composed of components (physical and/or virtual) that are delivered through two or more channels"* (p.358).

Against this backdrop, the nature of the service offer is regarded as separate from a particular service instance. That is, for online services, the service offer is a pre-configured virtual entity that can be scrutinised by a customer independently of actually receiving the service.

Multi-channel organisations have followed the evolution of new media for at least a century, initially in the form of postal printed catalogues, telephone and television sales. This leads to a variation in how service offers are managed compared to physical only channels.

More recently, multi-channel configurations have gained momentum because of affordable and ubiquitous ICT capability for both businesses and consumers

(Parasuraman & Zinkhan, 2002). Techniques for establishing the business value of online multi-channel configurations have been emerging from traditional operations analysis approaches such as quality function deployment. Such techniques can be used to communicate channel choices and bring together the need for multiple channels based on business value (Simons & Bouwman, 2008).

As an example, in online air travel, services can be initiated online but can only be fulfilled in person at an airport. Alternatively, other service offers are provided via complementary channels where information, services, and the fulfillment online are replicas of services that are offered in the physical setting. The customer then has a genuine choice in deciding which channels for both the offer and the delivery suits them best.

As a contrasting example, online banking is usually a complementary, online, multi-channel setting - the customer can achieve exactly the same objective online as they would in-person at a bank branch (Sousa & Voss, 2006). Additionally, in an online channel, the identity of the delivery agent is not always clear to the customer (Parasuraman, et al., 2005; Sousa & Voss, 2006; Voss, 2003). This lack of clarity leads to a separation of service capacity and the service agent that does not exist in a face to face service encounter.

2.10 Separation of service capacity and the service agent

In a technology mediated situation, the service agent and the service capacity perceived by the customer become separate. Much as the end-product quality of a factory produced product is not a direct reflection of an assembly line worker.

For example, the service capacity of a website is an amalgam of the efforts of multiple service agents: the content editor, the site designer, the web operations manager and the fulfillment agent.

What the customer 'sees' of the organisation shapes their prior expectation and, in turn, their ultimate perception of service performance. Any discordance of the service message across multiple channels is likely to erode the quality of the bi-directional communication.

The imaginary 'line of visibility' conceptualised in the marketing literature suggests an impervious barrier that represents the view of the organisation from the customer's perspective (Shostack, 1987).

In the ICT-enabled multi-channel organisation many of the traditional barriers to visibility are weakened exposing the organisation to unprecedented scrutiny from its customers (Cox & Dale, 2001; Tate, et al., 2006). This chance to get closer to customers can be regarded as representative of a valuable opportunity or a latent threat by the organisation depending on how well personalised communications are built into the service delivery system.

Done well, the organisation has the opportunity to engage with and build a mutually beneficial dialogue with large numbers of its customers. This dialogue will also allow customers unprecedented access to the organisation's thoughts and actions (Ansari & Mela, 2003).

For example, Microsoft Corporation is now actively allowing staff, who previously would have been invisible to customers, to record public blogs about their work and participate in public discussion forums (Burton, 2006). Done badly, however, high volume personalised communications can amount to little more than spam. It will change from a valuable marketing initiative into an unwelcome intrusion into the already busy life of an uninterested customer. That customer will then most likely defect to a less intrusive supplier (Davenport, et al., 2001; Koufaris, 2002).

The customer still has a sense of dealing with a service agent, especially in settings where traditional service settings are used as metaphors for the virtual setting. For example, it is common in e-commerce to use a virtual 'shopping cart' and conclude the transaction at a 'check-out'.

Such metaphors are designed to mimic the comfort levels of the familiar physical channel setting where people are used to the cultural norms of information seeking and purchasing in a real shopping setting (Davenport, et al., 2001; Duffy & Dale, 2002). These metaphors are common in e-commerce but there is an absence of literature about similar constructs being used in the public sector service context.

2.11 Line of visibility

The services marketing literature uses the term 'above the line of visibility' to represent those service actions that occur at the point of contact with the customer (Armistead & Clark, 1993; Bateson & Hoffman, 1999; Oliver, 1981).

On the other hand, the term 'below the line of visibility' represents elements of service delivery that affect a customer's perception of a service but of which the customer has little or no direct awareness (Bateson & Hoffman, 1999; S. W. Brown & Bitner, 2006; Gronroos, 2007; Tate, et al., 2006).

The line of visibility can be usefully delineated using Grove and Fisk's (1983) stage metaphor as follows (Grove & Fisk, 1983; Lovelock & Wirtz, 2004):

Physical evidence (i.e. website, office etc.)
Principal customer actions (customer-agent interface)
Line of interaction (customers and front stage personnel)
Front stage actions by customer-contact personnel
Line of visibility (between front stage and backstage)
Backstage actions by customer contact personnel
Support processes involving other service personnel
Support processes involving IT

Table 1 – Stage metaphor - line of visibility

2.12 Service delivery systems

This section discusses several approaches to defining what makes up service delivery systems. This is a critical aspect of this study, so multiple interpretations of service delivery systems are reviewed.

First, Armistead and Clark's (1993) resource activity orientation is examined. Second, Sousa and Voss's (2006) 'moments of contact' orientation is discussed. Third, Grönroos's (2007) internetwork orientation of service delivery systems is

considered alongside Bitner's (1992) servicescape perspective. While this is not an exhaustive list of SDS definitions, it does capture the variety and complexity involved in the service delivery systems setting.

2.12.1 *Resource activity orientation*

In their resource activity oriented definition, Armistead and Clark (1993) (Armistead & Clark, 1993) drew upon competitive advantage (Porter, 1980), strategy (Armistead, 1990) and causal ambiguity (Reed & DeFillippi, 1990) to describe a SDS in terms of the balance of resources, configuration, and process flow (See Figure 4).

Figure 4 - Armistead and Clark (1990) resource, process, and configuration view of SDS

Resources – The system provides sufficient process to achieve control of customer, quality, and productivity information. Resources are defined as the mixture of people, facilities, equipment, materials, and information systems.

Configuration - The transfer of information across geographic and organisational networks and between front-office (above the line of visibility) and back-office activities (below the line of visibility).

Process flow - The flow of service-related information as perceived by the customer represents a sequence of discreet service actions that must occur to meet the customer's service expectation (Armistead & Clark, 1993).

Armistead (ibid) applied this framework as an activity mapping-technique. The model was originally proposed for considering straightforward service delivery in

a single channel setting, or to examine an individual's interaction within a multi-channel configuration when only one channel is being considered.

However, it lacks the ability to provide insight into the consequences of cross-channel service provision and the virtual service dimension and how these work together to form an integrated service delivery system. The following discussion considers the moments of contact orientated model that addresses this shortfall.

2.12.2 Moments of contact orientation

Figure 5 - Sousa and Voss's (2006) model of multi-channel service delivery

Sousa and Voss (2006) challenged the single channel, front-office nature of research into e-service and suggested *"multi-channel settings call for a broader conceptualisation of service quality taking into account all moments of contact with the firm through several channels as well as contemplating the full scope of the service delivery system (front and back offices)."* (p.359).

The resulting framework (See Figure 5) separates SDSs into physical and virtual service delivery mechanisms plus an integration element. Each of these delivery

systems results in a corresponding (physical, virtual, and integration) quality perception by the customer.

Physical service quality has been well explored and investigated through quantitative tools such as the service quality disconfirmation instrument for assessing and diagnosing service quality called SERVQUAL. That instrument was developed in the 1980's by Parasuraman et al., (1985) and operationalised in many different contexts (Parasuraman, et al., 2005; Sousa & Voss, 2006; Sylvester, et al., 2011).

Virtual service quality in the context of web interaction has been the subject of investigation over at least the last decade and continues to be the subject of ongoing study as online media options evolve (Agarwal & Venkatesh, 2002; Parasuraman, et al., 2005; Zeithaml, et al., 2002).

The nature of the underlying service delivery systems for virtual channels is fundamentally different in that it relies on automated service delivery (Sousa & Voss, 2006). Automation effectively decouples the service agent from the customer, making it more difficult to detect and respond to service failures in a timely manner unless the service recovery process is also automated (Ahmad, 2002).

An interesting variant is the role of physical service channel in recovery from service failures that occur in the virtual channel. That is, when service failures occur in virtual channels the organisational intervention is often carried out by way of the physical channel (Shaw & Craighead, 2003).

Integration service quality is concerned with the ability of the combined SDS to deliver a multi-channel experience to the customer (Sousa & Voss, 2006). SDS's with high levels of cross-channel integration have had very little research conducted on them (Loiacono, Watson, & Goodhue, 2007; Sousa & Voss, 2006).

Integrated communications in the multi-channel SDS relates to consistency of interaction for the customer (Sousa & Voss, 2006). If the customer receives different information regarding service offers, progress, and outcomes depending on their channel choices then there is an unsatisfactory level of integration quality (Montoya-Weiss, Voss, & Grewal, 2003).

For this research, the integrated perspective is of particular interest. In the PSO multi-channel setting SDS's that must span multiple technologies and service context are indicators of a potentially complex information systems problem domain.

2.12.3 Internetwork of service delivery systems orientation

Gronroos (2007) takes a contrasting view of SDS's in the multi-channel setting to the Sousa and Voss (2006) perspective above. In the online multi-channel setting, SDS's can overlap and form a network of interdependent systems (Gronroos, 2007).

For example, an airline reservations system may offer travel insurance and hotel bookings as value added services. Or, as in the case of Amazon.com selling sports goods, products offered by an alternative online supplier are automatically represented in Amazon's channel and rely on the SDS of the hidden organisation to fulfill the customer's requirements.

The next section summarises the contribution to service delivery that the emerging study of services science has made.

2.13 Summary of service science

Service science sets out to establish the boundaries and ontological definitions of service delivery in a consistent manner for the purposes of developing operational service environments (Katzan, 2009; Sampson, Scott, & Froehle, 2006; Vargo & Lusch, 2004). From the service science perspective, inquiry into services is no longer seen as a narrowly defined 'soft' marketing or management exercise but instead it is viewed as an interdisciplinary field. Since 2004 service science has become an increasingly popular area of inquiry led initially by IBM corporation's advocacy of service as a science (Chesbrough & Spohrer, 2006).

Vargo & Lusch's (2004a) service dominant logic and customer experience management focus has extended the scope of service into needing to embrace broad concepts. Initial articles in the IBM systems journal triggered calls for a multi-disciplinary research approach that draws from disciplines such as computer science, operations research, engineering, management, marketing, social and

natural sciences. This has led to emergence of what some describe as a new discipline of service science (Chesbrough & Spohrer, 2006; Spohrer, Anderson, Pass, Ager, & Gruhl, 2008).

2.13.1 The change in services that drove the call for a service science approach

US Department of Commerce Standard Industrial Classification (SIC) codes from the 1930's defined main economic areas as: agriculture, manufacturing and services (Chesbrough & Spohrer, 2006). Hill (1977) defined services as “*a change in condition of a person or good belonging to some economic entity*” (p.318). Hill's definition was subsequently incorporated into the North American Product Classification scheme that was initiated in the late 1990's and currently informs that widely accepted definition of the services economic sector (Chesbrough & Spohrer, 2006; Hill, 1977).

Basle and Rouse (2008) situate services science in the context of service networks. They assert that organisations do not operate in isolated relationships with their customers but rather exist in a complex internetwork of relationships with many customers, suppliers and government agencies that are changing and can fulfil multiple of these roles, often at the same time. They also highlighted that a traditional linear Porter's value chain viewpoint is not sufficient to describe fully the service network relationships that exist in business to business, business to consumer relationships.

Service science is a potentially useful mechanism for examining the business drivers and operating requirements of service delivery operations. Recent service science authors such as Koumpis (2010) have broadened the scope of service science beyond just the implementation of service-supporting technology artefacts and led a call for a holistic approach. Koumpis (ibid p.31) points out: “*Business, information technology and organisational aspects affect collaborative relationships but these also have similarity to the duality of action and structure inherent in any type of enterprise constituent. This duality refers to the structure of social institutions being created by human action.*” Organisational learning has a role to play in addressing the collaborative and social institutional aspects of the service delivery context. Organisational learning in service delivery does not

replace service science or vice-versa but rather they are complimentary ways of approaching the same domain.

In addition, a potentially problematic area for service research in PSO's is that service networks bring with them an implicit acceptance that the consumer is the trigger for all the activities in the service value network. However, in public sector service delivery the service value is not always triggered at the point where it is realized. For example, a tax payer paying their annual return is creating value for the community (and indirectly for themselves) but does not necessarily perceive that payment process as rewarding.

Chesbrough and Spohrer (2006) point out that as service science innovation has become a major revenue stream for traditional goods oriented firms so the calls for a deeper understanding of how to manage those services has also increased in order to better understand key aspects of service science such as:

- Supplier and customer interaction
- Knowledge creation and exchange
- Simultaneity of production and consumption timing (especially important in multi-channel contexts)
- Embedding of knowledge into service systems
- Service exchange as customer process and experience touch points
- The use of ICT to facilitate services.

To achieve understanding of these aspects a service science discipline needs to understand how to manage the corollary that Chesbrough and Spohrer (2006) describe as: *“each party in the exchange needs the others knowledge in negotiating the exchange”* (p.37).

Papazoglou (2011) describes the need for ongoing inquiry into service science as essential due to the evolving nature of the service sector and that service configurations are constantly changing in response to competitive and social changes. They describe these changes as shallow and deep. Shallow changes are the small incremental changes that are local and contained within a particular service context. On the other hand, deep changes are the large scale changes that may affect an entire service context from the customer and service organisation

point of view or even extend through the service value network. They call for a better understanding of the causes and impacts of change in the service delivery context. Service science as a multi-disciplinary approach is capable of helping address this need (Baida, et al., 2003; Michael Blakemore & Frank Wilson, 2009; Chesbrough & Spohrer, 2006; Papazoglou & Andrikopolous, 2011; Sampson, et al., 2006).

This concludes the discussion about service delivery systems. The next section introduces public sector management in New Zealand.

2.14 Public sector management in New Zealand

Since 1985, New Zealand has undergone multiple iterations of public sector reform (Boston, et al., 1996). The ‘new’ model of public management was introduced progressively through the 1990’s. It was built around ideas of performance improvement and achieving gains in efficiency and effectiveness of the public institutions (Boston, et al., 1996).

The shift from bureaucratic models to new public management to matrix and network models have all paved the way for the current generation of New Zealand public managers who are familiar with change and scrutiny as a constant way of life (Boston, et al., 1996; Miller, 2010).

The focus for this research is on operational managers who deliver systems within the obligations of a mature public sector.

2.15 Summing up service delivery systems

As we have seen in the preceding discussion, the service delivery system is rarely, if ever, a single homogenous information system with a clearly defined systems life cycle. This is especially the case when considering service delivery in public sector organisations where the nature of the service exchange is based on relationships more complicated than a commercial exchange of value. Instead, it becomes the integration of various overlapping systems, information flows, processes and policies that have to converge to form the systems-base for service delivery and are subject to public and political scrutiny. Additionally, most PSO multi-channel service delivery systems are in a near constant state of change and

review as organisational goals and processes adapt to a changes in the economic, commercial and political climate (Gronroos, 1990, 2008).

Service delivery systems for multi-channel PSO's is an area that is largely unstudied in academic literature. In the following chapter three the gaps in the literature and the concept involved are examined more closely with a view to adapting an existing high level framework and applying it to this new context.

Chapter 3 Analytical framework

This chapter introduces ideas that have been adapted from the literature and synthesised for use in this research, or are novel to the research. Its purpose is to provide additional depth to the research question and draws upon the literature introduced previously as a guide to build an analytical lens that provides a frame of reference to be used in the following analysis chapters.

The chapter begins with a discussion of service delivery managers in the New Zealand PSO context and situates their key role in PSO organisational learning.

In section 3.2 then goes on to discuss service capacity management of multi-channel organisations in the PSO setting as a specific domain of inquiry. That domain has unique management characteristics that in-turn create organisational learning demands that require a different inquiry treatment than would be the case in a more straightforward service delivery setting.

Section 3.3 discusses the gap in the available literature around integration of systems that support multiple service delivery channels. It also discusses the learning required to understand how multi-channel service delivery influences managers and the decisions they have to make.

Section 3.4 then situates the managers of multi-channel service delivery systems as a pivot point for the successful delivery and operation of service delivery systems.

Section 3.5 addresses the question of what kind of analytical lens is suitable for exploring the organisational learning styles of service delivery PSO's.

3.1 Situating the service delivery managers

To better understand the drivers of service delivery performance, it is helpful to first establish how the managers of service delivery systems go about learning about what the standards and best practices are for their service functions to operate. In addition, it is also necessary to understand how learning about standards and practices is used for evolving service delivery systems.

When public sector service delivery capacity is operationalised by the service managers, its performance is typically judged against an agreed standard, how many visitors were helped; were certificates issued within agreed timeframes; and/or was a law complied with (Orr, 2005; Parasuraman, 2004).

Managers of service delivery systems do not belong to a single profession or fit neatly into any particular occupational grouping so their expectations, ambitions and motives vary according to the organisations particular circumstances.

The managers of multi-channel PSO service delivery systems are an interesting unit of analysis because they are charged with translating strategy into operations and are responsible for communicating the products of the service exchange into organisational learning that can be used to adapt future versions of the delivery system to improve performance (Barrutia & Gilsanz, 2009; Connolly, Bannister, & Kearney, 2010; Lips, et al., 2010; SSC, 2003).

In addition, managing service delivery performance becomes an increasingly complex challenge as the number of service delivery channels increases (Sousa & Voss, 2006). To explore this further, the following section considers the role of managing service capacity in multi-channel service delivery situations as a particular information management challenge.

3.2 Service capacity management in multi-channel organisations.

As discussed in the literature review section 2.10, the separation of service capacity and the service delivery agent is a consequence of the multi-channel service delivery context.

In the traditional face-to-face physical channel, the delivery agent and service capacity are inseparable at the moment of contact. That is, service delivery and the customer's perception of that service occur concurrently (Gronroos, 1990).

However, in the technology-mediated channel, service capacity is tied to a pre-designed service offer. Existing literature fails to fully address the complexity that arises in service delivery systems that use multiple channels and therefore has a latent service capacity that is determined by the ability of the system to deliver the service.

That service logic has been encoded using information technologies and systems, this encoded service offer represents the organisation's capacity to provide a service, regardless of whether the customer is actually engaged in a transaction at that point in time (Gronroos, 2008; Parasuraman, et al., 2005; Sousa & Voss, 2006). For example, an airline offering a low-cost airfare develops the service offer on its website in such a way that the customer is fully informed of the terms and conditions without having to switch to a physical channel.

Service capacity is, for all but the most trivial enterprises, achieved by drawing on supporting resources that operate behind a line of visibility. However, in the virtual setting, these representations of performance, culture and competence are, almost exclusively, ICT supported. In contrast, in the physical setting, a combined ICT and face-to-face configuration is required.

Figure 6 - Situating service capacity in Multi-channel service delivery

The diagram in Figure 6 illustrates how this researcher views service capacity in the multi-channel PSO context. Derived from the literature introduced in Chapter 2, this diagram brings together the physical, virtual and integrated channel elements from Sousa and Voss (2006) and puts it in context with the learning organisation. It diagram also situates the decoupling of the service agent in the virtual channel setting. On top of that the diagram illustrates how the actions of the multi-channel service agents can take place at points above the line of visibility. As a result, the organisations enacting of its organisational learning about service capacity may be taking place in full view of the customer and that in-turn affects the customer's choices about how to engage with the organisation. I propose that the decoupled service capacity of the virtual channel creates a service delivery systems definition challenge for managers of SDS's.

Managers defining service delivery systems in multi-channel settings have an influence on service outcomes by influencing the effectiveness of the complex SDS setting in a different way than in the face to face equivalent. That is, the role of the SDS moves from being a technology to support the service agent who creates the service capacity to being the repository of service capacity.

In the New Zealand PSO context, identifying the actual customer can be difficult. When dealing with public sector customers the recipient of the service encounter may be a completely different person to those the service delivery manager regards as the customer.

Having identified the managers as the gatekeepers of organisational learning and multi-channel service delivery systems as creating a complex service delivery situation it is now necessary to understand the multiple channels and their integration into a service delivery system.

In the next section the issue of how the integration of multiple virtual channels influence the SDS context is considered.

3.3 Channel integration

Another gap in the service quality literature is in the area of cross channel consistency of information delivery (Gulati & Garino, 2000; Parasuraman & Zeithaml, 2001; Sousa & Voss, 2006; Tate, et al., 2006; Zeithaml, et al., 2002).

In order to examine how and why managers lead their organisations to learn about delivering services across multiple channels an expanded view of channel integration is required. This research situates the organisational learning activities of service delivery managers as a necessary aspect of multi-channel service channel integration.

Intuitively, service agents striving for service quality should be attempting to deliver a consistent message to the customer regardless of their channel choice. For example, a customer gathering service information from a website should be confident that the same information quality will hold true when they interact with service staff at a physical service desk (Barrutia & Gilsanz, 2009; Connolly, et al., 2010; Gronroos, 2008; Meyer & Schwager, 2007; Shostack, 1987; Vassilakis, Lepouras, & Halatsis, 2007).

In the PSO multi-channel SDS setting, the nature of channels is not as clear cut as in their commercial equivalents (SSC, 2009). Managers have to define web based channels with new methods and approaches to suit emerging e-government and online citizenship requirements in mind (Connolly, et al., 2010; Lips, et al., 2010; Vassilakis, et al., 2007). As a result service delivery managers in New Zealand PSO have a critical role and complex accountability in defining service offering in the PSO multi-channel service delivery.

3.4 The role of service managers in service delivery systems

In addition to the complex service delivery systems context, PSO managers are themselves frequently accountable to multiple stakeholders and have a strong service ethic that spans normal organisational boundaries (Rust & Thompson, 2006; Sambamurthy, Bharadwaj, & Grover, 2003; Slater & Narver, 2000).

This stakeholder complexity creates a need to understand the learning mechanisms at work when managers are serving multiple ‘customers’. For instance, it is necessary to establish if traditional commercially driven notions of customer service still hold true.

3.5 The adapted framework

To address this, the seven learning orientations and ten facilitating factors introduced in chapter two (Section 2.6) are adapted as part of an analytical lens

for use in this research. This provides a mechanism for exploring how and why the managers and their organisations go about understanding and evolving their service delivery systems. To achieve this, it is necessary to further expand those orientations and factors in order to make them relevant to the New Zealand public sector service delivery context and to set out the analytical lens that will guide the reporting of the research.

The resulting research lens will provide the means to explain how the managers build their own knowledge sources, how they use and build on inherent organisational capability, and how they transfer that knowledge across multi-channel service delivery teams and manage that knowledge over time.

As a result of situating the managers in this way it is possible to establish what organisational learning opportunities are available to the service delivery managers for acquiring and building new knowledge that improves or maintains service delivery performance. In order to adapt the high level framework to suit the specific context of this research it is first necessary to better understand the phenomenon being researched.

The following adapted framework draws its headings and definitions from DiBella and Nevis's (1998) capability-oriented framework introduced in the literature review.

The framework is adapted on the basis of existing literature and scoping conversations with the New Zealand State Services Commission to accommodate the nature of the PSO multi-channel service delivery context. Based on ideas from the literature review (chapter 2), a revised version of the DiBella and Nevis framework acts as the starting point for the analytical lens used in the case study analysis.

The framework uses the seven learning orientations concepts from the integrated capability model to explain how organisations learn as introduced in section 2.6 on page 51 of the Literature Review chapter. On top of that, it uses the ten facilitating factors from the model to explain why organisations learn. Each of the headings is described in the following learning orientation and facilitating factor descriptions. The revised version can be described as follows.

3.5.1 *Part a – Adapted learning orientations*

Knowledge source focus - this orientation examines where the preference for acquiring new knowledge about service delivery practice comes from. It could be sourced between internal resources and experience at the innovative end of the dimension or from external sources at the reflective imitation end. This orientation is used to explore how service managers value learning about service delivery and what value the culture within the organisation places on that knowledge acquisition process (Ballantyne & Varey, 2006; Bolton, 1993; DiBella & Nevis, 1998).

Product or process focus - this orientation explores whether the organisation has a preference for accumulating knowledge about service end results and outcomes that focuses mainly on deliverables (the ‘what’ end of the continuum), or prefers to take a process oriented focus (the ‘how’ end). This orientation will also help to explore how managers feel about the organisational response to service activities by providing reference points for managers to situate their responses within (DiBella & Nevis, 1998; Hamel & Prahalad, 2010).

Documentation mode - this orientation explores attitudes and behavior associated with how the organisation values its store of accumulated knowledge. At one end of the continuum is the boundary condition of personal acquisition through education and experiences, subjective view of knowledge. While at the other end is the explicit and easily transferable, objective view of knowledge. Examining this orientation will help to comprehend how the organisation values knowledge transfer in service delivery systems management (Nevis, et al., 1995; Nonaka & Takeuchi, 1995; Nonaka, et al., 2000).

Dissemination mode - this mode refers to the manner in which learning in the organisation propagates and becomes socially communicated. The continuum spans from formally documented procedures and hierarchical communications through to informal ‘water-cooler’⁴ cultures. This also embraces learning through communities of practices and similar socially oriented configurations.

⁴ A ‘water cooler’ conversation in this context refers to informal sharing of organisational knowledge without following formal channels or being documented.

Scrutinising this mode will assist with understanding how ideas and attitudes about successful service delivery spread within the organisation (DiBella & Nevis, 1998; Fischer, 2000; Senge, 2006; Wenger, 2000).

Learning focus - this focus explores how the organisation favours (or not) learning that supports the continuance of existing team practices including single and double loop learning practices (Argyris & Schon, 1996; Crossan, 2003b). Exploring this focus will help to develop understanding about whether the organisation views learning about service delivery in terms of improving efficiency or whether it favours finding alternative mechanisms for delivery services (DiBella & Nevis, 1998).

Value-Chain focus - this focus is based on the assumption that learning occurs in areas of core competence (Hamel & Prahalad, 2010). It examines whether the organisation sees itself as an ‘engineering’ (*design and make the solution*) or ‘marketing’ (*sell and deliver*) focused organisation. Understanding this focus may help to understand the learning that goes into defining particular service delivery configurations (DiBella & Nevis, 1998; Porter, 1980 2001).

Skill Development focus - this focus spans individual to group learning and contrasts individual and team learning, recognising that both are necessary for organisational learning to occur but that the organisation can put more emphasis on one or the other. Examining this focus helps to reflect how the organisation values team learning about service delivery systems over building up of individual expertise (Dechant, et al., 2000; DiBella & Nevis, 1998; Senge, 1990; Yorks, Marsick, Kasl, & Dechant, 2003).

3.5.2 Part b – Adapted facilitating factors

Scanning imperative - this factor describes the extent of searching and knowledge acquisition about good service delivery practice that goes beyond the groups own knowledge base. Examining this factor helps to identify the learning strategies present when service delivery managers use information scanning to seek out and build new knowledge from improved understanding of the operating environment (DiBella & Nevis, 1998; Jarrar & Zairi, 2000; Stuart, Frederick J. Marc-Aurele, & Jiannan, 2005).

Performance gap - this factor identifies a managerial perception of a shared awareness within a service team of a gap between actual service delivery performance and a desired optimal level of service delivery performance. Understanding the service-performance gap is helpful for identifying how performance is, or should be measured.

Concern for measurement - the concern for measurement factor is distinct from the measurement activity itself. Measurement and identifying key metrics is a cornerstone of quality management (Anderson, Rungtusanatham, & Schroeder, 1994). However, a manager being concerned about measurement and the learning that is associated with identifying appropriate metrics is a means of surfacing mental models and empowering organisational learning (DiBella & Nevis, 1998; Easterby-Smith & Lyles, 2003). Gaining an appreciation of how service delivery managers learn about what to measure will help understand how they view their need for systems that support those measures (Kaplan & Norton, 1992; Schmidt & Finnigan, 1992).

Experimental mind-set - this factor helps to understand how the organisation regards 'playing' with new ideas, methods and approaches. It explores the paradox of delivering services consistently against the organisational learning opportunities that are presented when experimentation is encouraged (DiBella & Nevis, 1998). Service delivery systems are, by their nature hybrid and evolving systems requiring maintenance and an evolutionary cycle. This factor can help to understand how managers balance the need to develop new systems with the need to deliver predictable services (Garvin, 1993).

Climate of openness - this factor helps to understand the extent to which the organisation allows debate and challenging of norms without regard to hierarchy (Lucas, 2005; Wenger, 2000). It explores manager's defensive routines and the ways that mistakes are valued as learning opportunities (Argyris, 1986). In addition, it considers whether planning and problem solving is an organisation wide activity or whether it is the role of a few key people. Exploring this factor helps understanding of how systems learning opportunities arise from problems and issues (DiBella & Nevis, 1998; Lucas, 2005).

Continuous education - this factor considers education as an individual responsibility so that individuals can contribute to organisational learning by having a wide base of skills and competencies to draw on – what Peter Senge (2006) calls personal mastery. Service delivery systems are as much about the people who configure and operate them as they are about storage and communications technologies. Clear support for ongoing education at all levels of the organisation helps to understand how the organisation values the latent potential of its people (Argyris, 1991; Stata, 1989; Turner, Mavin, & Minocha, 2006; Weick, 2002).

Operational variety - along with the experimental mindset, this factor exposes the organisations attitudes towards variation and change. Pluralism is contrasted with absolutism in choice of methods (DiBella & Nevis, 1998). The paradox here is that accepted efficiency-focused management does not endorsed pluralism but organisational learning and change benefit from variety in strategy and technique (Nevis, et al., 1995). Understanding how the organisation values pluralistic competencies and variety in methods, procedures and systems will help to develop an insight into how organisational learning thinking contributes to service delivery systems evolution (Baida, et al., 2003; Voss, 2003).

Multiple advocates - advocacy (or championing) is a recognised means for ideas to propagate within an organisation. The CEO is often the most readily identifiable advocate of organisational change (Senge, 1990; Stata, 1989). However, champions exist at all levels in the organisational hierarchy. Exploring how new ideas and methods about service delivery are welcomed and championed, regardless of organisational hierarchy factor helps to build an understanding of the role of advocacy in service delivery system (Crossan, 2003a; DiBella & Nevis, 1998; Weick, 2002).

Involved leadership - the role of leaders as articulators of strategy and vision is a well-established management axiom (Hamel & Prahalad, 2010) . Organisational learning literature suggests that an ongoing commitment and involvement of leaders in acquiring and using new knowledge is essential for ongoing knowledge dissemination and utilisation (Murray, 2002). This factor explores the extent to which leaders become actively involved in articulating a vision; interacting with

members of the service delivery teams, and become actively involved in educational programmes, as perceived by the operational managers of those systems (Crossan, 2003b; DiBella & Nevis, 1998; Huber, 1991).

Systems perspective - this factor is Senge's (2006) 'fifth discipline' that he asserts integrates all the other aspects of organisational learning in his five dimensional model of organisational learning. The systems perspective reflects the degree to which managers view their organisation as a systemic whole. This includes alignment with organisational strategy, relationships and dependency on other departments and systems (DiBella & Nevis, 1998; Murray, 2002; Shrivastava, 1983).

3.5.3 *Conclusion*

In this chapter the PSO service manager has been identified as a pivotal player in the multi-channel service delivery setting and has set the scene for the research methodology discussion to follow in chapter four below. This is because they are managing service delivery systems that address service requirements of multifaceted customer settings and involve manipulating SDS's that are themselves evolving rapidly to meet the needs of public sector changes.

The integrated capability perspective of organisational learning has been brought through from the literature review and adapted to form a research lens that can be used to focus on these managers as representatives of this complex service context. In the next chapter this will be further adapted to form an interview protocol in the research method.

Chapter 4 Research method

This chapter introduces the research design. It begins by situating the design requirements in terms of the research questions developed in chapter one.

The chapter begins with restating the research question and expands on the phenomenon of interest the research question raises. The subsequent sections in the chapter provide an introduction to the influential paradigms in information systems research that have influenced the researcher and lead to the selection of a *constructionist* paradigmatic approach and a *relativist* ontological viewpoint with regard to this research. Influential research approaches are summarised and addresses why the choice was made to take a *qualitative* approach and *subjective* epistemological approach. The following sections then go on to introduce the research method used in terms of the strategy employed for collecting, analysing and reporting of the research findings.

This is followed by a discussion of the use of case research and specifically the use and organisation of the multiple cases in this research. The chapter concludes with a description of the data collection and analysis procedures used in the research.

4.1 The qualitative approach

Janesick (2000) in Denzin and Lincoln (2005) p.377 states: “*the essence of good qualitative research design requires the use of a set of procedures that are at once open-ended and rigorous*”. The qualitative researcher is faced with a range of design decisions that need to be sufficiently flexible and open to allow the researcher to gather the necessary empirical evidence that addresses the research questions, while remaining consistent to the selected paradigmatic and methodological approaches (Denzin & Lincoln, 2005).

4.2 Research question revisited

The research question identified in chapter one is revisited here to establish the phenomenological basis for the choices to come.

1) To what extent and how does organisational learning influence service delivery systems in public sector organisations that deliver services across multiple channels?

This question introduces three multifaceted dimensions of social inquiry: (i) it deals with organisational learning – itself a complex social construct – (ii) it explores public sector organisations – social systems that exhibit unique cultural and organisational value systems - and (iii) it involves service delivery in virtual and physical contexts – a complicated systems channel dynamic and multiple perceptions of service based phenomenon.

Inquiry into this phenomenon is contextually bounded by learning, organisations, and holistic information systems. This type of inquiry requires a paradigm and a methodological approach that reflects the complex interactions involved without removing them from their natural setting. This question is essentially *exploratory* in nature by seeking a rich and contextually situated understanding.

4.3 Research Paradigm

A paradigm is a particular way of looking at the world in order to understand its complexity and make sense of reality (Lincoln & Guba, 1985). It is the frame-of-reference brought to a study. Within a particular paradigm, the researcher will carry out their work.

Researchers use this framework to draw conclusions and make statements about phenomena of interest to them (ibid). The paradigm selected guides the research and guides the choice of tools, instruments, participants, and research methods (Denzin & Lincoln, 2011).

The paradigm a researcher operates within is a set of abstract premises and a point of view that needs to be understood before tools and techniques are adopted. Without this clarity a researcher risks making decisions about techniques that yield results that are inconsistent with the researcher's notions of what is true (Denzin & Lincoln, 2011).

4.4 Influential paradigms

The following sections briefly summarise and review a set of influential paradigms and consider their position in research traditions.

4.4.1 Positivism and post-positivism

Positivism is a form of philosophical realism that adopts scientific method and uses systematic observation and description of phenomena situated within a model or theory.

It involves testing of hypotheses with controlled experiments to validate (or not) hypotheses against the original theory. The goal of positivistic inquiry is to arrive at an explanation that can be used for subsequent prediction and control of some phenomena (Huberman & Miles, 1994).

Post-positivism arose out of dissatisfaction with some aspects of the positivist stance. Where positivists seek an objective reality, post-positivists acknowledge an objective but imperfect reality that human endeavour is intrinsically flawed and real-world phenomena are complicated. They acknowledge a “true” reality as an impossible ideal (Lincoln & Guba, 1985).

The domain of inquiry for this research is made up of organisational systems, learning taking place in a social culture and the attitudes, culture and beliefs of a social system. The risk with taking a positivist or post-positivist stance is that too much of the nature of the phenomenon would be lost if an objective truth is sought. Therefore, for this research a means that allows for the ‘messiness’ of the domain of inquiry to show through is necessary.

4.4.2 Critical theory

Critical theory sets out to have an opinion and to challenge the status quo. Its roots stem from the Institute of Social Research at the University of Frankfurt in the 1920s and their antecedents (Creswell, 2003; Crotty, 1998).

Critical theorists from the Frankfurt School included Max Horkheimer, Theodor Adorno, and Herbert Marcuse and others. These scholars took the stance that “injustice and subjugation shape the lived world” (Crotty, 1998; Denzin &

Lincoln, 2011). Fleeing war-time Europe for California in the 1930's these scholars were shocked by the social contradictions in America of the era (ibid).

Critical research has become a viable research alternative in information systems research as the Internet and information technology generally has increasingly become a socially embedded phenomenon (Myers & Klein, 2011).

Criticalists advocate a reality constructed within a socio-historical context. However, criticalists conceptualise reality and events in terms of power relations. They use their research inquiry to empower participants to work toward egalitarian and democratic change (Crotty, 1998).

In this way, critical theory goes beyond accumulating knowledge, but instead, seeks to offer a critique and to address injustices found in the course of the research.

Critical management studies (CMS) is a branch of critical inquiry that has emerged since the 1980's. CMS challenges the assumption that managers have, by virtue of status, a unique insight into the business context they operate in (Alvesson & Willmott, 1992). Instead, CMS seek to view management processes with a critical appreciation of the mesh of social and political factors that corporate managers operate within (Fournier & Grey, 2000).

4.4.2.1 Critical research in IS

The critical perspective has become interesting to IS scholars as the evolution and convergence of IS phenomenon such as online services using websites, mobile communications and social media has become part of society.

Cecez-Kecmanovic (2008) highlighted five concerns of critical researchers in IS to illustrate the opportunity for a critical perspective: criticism of the underlying instrumental rationality bias in IS and management ideology (consistent with the CMS perspective); classification and criticism of existing technology-driven development models and the need to explore of alternative approaches to the construction and use of IS artefacts; criticism of the dominating IS research canons and their imperfections of a 'scientific' approach; a meta-critical analysis of the research literature in IS; and introduction of new theoretical foundations

in the critical debates. They highlighted that the tradition of critical research implies settings that are subject to: change, fluctuating agendas, and frequently require renegotiation of traditional explanations of behaviour. All this suggests a new theoretical perspective and that these conditions are consistent with the consequences of IS use and adoption.

Doolin & McLeod (2005) extended this thinking to be part of the role of what they call critical interpretivism that has a now established tradition in IS. They illuminated three aspects as characterising critical interpretivism: the need for detailed, local, and situated empirical interpretation that is data-driven rather than data-centred. The need to use reflexivity to reveal and critique established assumptions and the status quo. Finally, to situate interpretation within its political and power relations (this is consistent with the CMS agenda). These three perspectives are potentially non-neutral and seek to situate IS research in a wider historical and societal context.

A useful contrast comes from Klein and Myers's (1999) principles for conducting and evaluating critical interpretive field studies in information systems. The principles of: the hermeneutic circle, contextualisation, interaction between researcher and subjects, abstraction and generalisation, dialogical reasoning, multiple interpretations, and the principle of suspicion. These seven principles draw on reasoning from ethnography, phenomenology and hermeneutics rather than from adopting critical theory directly. However, they are closely related in their acknowledgement of the need for the researcher to evaluate and comprehend the socio-political and historical context in which their IS research takes place.

Another contrasting can be drawn from Richardson and Robinson (2007) who argued that there is more to IS research than just a choice of positivism or critical interpretivism. They re-examined Chen and Hirscheims's 2004 survey of IS research adding to it and including the critical research paradigm. They suggest that a critical paradigmatic approach can be a viable alternative or even an academic obligation in some settings. That perspective is consistent with the increasing adoption by the IS community of critical interpretive perspectives as introduced in the mid 1990's by Walsham (1995) and paralleled the move of IS

from being a technical and organisational configuration challenge to becoming the social phenomenon it is today.

Organisational learning in multi-channel service delivery in the New Zealand public sector is representative of the sort of interesting problem domain arising from the embedding of IS into the fundamental social fabric of society. A lack of empirical knowledge requires an ‘open mind’ and not a critical epistemological stance per-se. While not warranting a fully critical or consideration from an emancipatory perspective, the social context in which public sector service delivery occurs across multiple channels requires an interpretive stance that enfolds the social processes. Including the organisational context in which services occur and the role of the technological implementation of systems. This research seeks to empirically explore, interpret and understand the mechanics of what is going on rather than redressing a fundamental social imbalance. The following discussion of constructivism and constructionism seeks to find a methodology that achieves this objective.

4.4.3 Constructivism

The constructivist paradigm is an alternative to the positivist or post-positivist paradigm. Constructivism adheres to a relativist position that assumes multiple equally valid realities (Denzin & Lincoln, 2005).

Constructivists assert that reality is constructed in the mind of the individual, rather than being an independent singular entity. It recognises the value systems, backgrounds and experiences of individuals as being representative of their multiple realities. As a result, a single unified representation of truth is not possible (Denzin & Lincoln, 2011).

Therefore, in constructivist inquiry it is necessary to examine the subjective knowledge residing in multiple members of a society or community of interest and interpret their views effectively making the interpreter a part of that society or community (Creswell, 2003; Lincoln & Guba, 1985).

In constructivism the interaction between the investigator and the subject being investigated becomes paramount and only through this interaction can deeper meaning be discovered.

The goal of the constructivist researcher is to reflect truthfully and fully the lived experiences of a person within the culture they represent. The findings are co-constructed by researcher and the participants from their dialogue and the subsequent analysis by the researcher. They achieve this through an iterative and incremental hermeneutic cycle (Crotty, 1998).

The hermeneutic cycle is part of constructivist perspective that extends the cycle to a “second loop” that involves a deeper shared construction of reality by the research participant’s interactions with each other.

The hermeneutic cycle refers to how understanding can be thought of as an iterative process where understanding is derived from the sharing of what is already understood and, in turn, that more developed understanding is used to illuminate and enlarge the initial understanding (ibid).

The double hermeneutic cycle of constructivism is consistent with the research project objective of contributing to a deeper understanding of the learning mechanisms that managers use to create service delivery information systems and contribute to explanatory theory (ibid).

The constructivist approach is a good candidate for this research but not good enough. This research is aimed at groups of managers who operate within a wider cultural and political context and many parts of their reality is a known quantity. The constructionist approach which is closely related to constructivism but has a subtly different philosophical basis that lends itself to researching established groups such as the service managers in this research. The following section examines this approach.

4.4.4 Constructionism

The version of the constructionist paradigm adopted in this research is situated at a point between naïve realism at one extreme and naïve relativism at the other as illustrated in Figure 7, this position is sometimes also referred to as moderate

constructionism (Järvensivu & Törnroos, 2009). For the purposes of this discussion the single label ‘constructionism’ is used.

Figure 7 - Järvensivu 2010; citing Lincoln & Guba 2000 and Easton 2002

Holstien and Gubrum (in Denzin & Lincoln, 2011, p. 341) describe constructionism as: “...*interactional constitution of lived realities within discernible contexts of social interaction*”. This is consistent with the idea that social constructionism relies on language as the mechanism for communication of a social construction of reality (Patton, 2002).

A premise that informs this research is described in the following quote by Crotty (1998): “*What constructionism claims is that meanings are constructed by human beings as they engage with the world they are interpreting (p.88).*” This definition is particularly helpful on two grounds: Firstly, constructionism is a relativistic pursuit where knowledge is viewed as relative to a time, place, or social context. Crotty (1998) uses the example of a tree to illustrate the role that cultural context plays in ascribing meaning to a phenomenon that surrounds us. The term tree means one thing to a person in a logging town, and can mean

something quite different to a person living in an urban slum with no access to trees.

This multiple contextual view of a phenomenon allows the researcher to focus on exploring how it is that people make sense of their encounters and transform them into a shared experience that in-turn forms the social context of their community.

The following simple example illustrates how a constructed shared reality might work; the hypothetical example considers how five different roles in the same organisation might view the same phenomenon:

The researcher asks: *Tell me about your network security?*

CEO – *OK, our security is important for managing our business continuity obligations.*

CIO – *Well, it is pretty good, because we have structures in place that audit our processes and our technology procurement is sound.*

Infrastructure manager – *I think it is fine; we use an outsource-insource hybrid model that means our key security technologies are up to date.*

Technician – *I like it, because we are most up to date technologies and we are well trained.*

End User – *I like that don't have to worry about it, my emails are checked for spam and viruses so I do not get interrupted.*

Although the answers vary, they are all supportive of the idea that they have a secure network, but they have quite different reasons for expressing that support, depending on their viewpoint; they each represent their own reality of network security for that person. In addition, they also represent the shared reality for the group when the responses are viewed as a whole. In this example, no one view of reality of their network security is more correct than the others.

As in the previous example, the managers in PSOs have multiple worldviews, some of which coincide and some conflict. Even when they are viewing the same

essential phenomenon there are a variety of reasons, motives and interpretations all of which have validity in the context within which they operate. Secondly, the act of engaging with these managers and interpreting their perceptions involves a dialogue and individual choices by the researcher, creating a canvas that represents new knowledge about the shared interpretation of the phenomenon.

Viewing the constructionist paradigm in this way also helps to position the role of realist and relativist theory in this research. The completely realist ontological perspective takes a wholly deductive stance with regard to testing theory while the completely relativist perspective is wholly inductive (Denzin & Lincoln, 2011). Closely aligned with the relativist perspective, the constructionist paradigm allows for theory to have a role in the interpretation of empirical knowledge in an abductive manner. Abduction in these terms refers to the process of deducing conclusions from the empirical findings. That is, although a research finding may be consistent with established theory the theory itself is also subject to critique and adaptation as part of the research process (Järvensivu & Törnroos, 2009).

This approach is suited to this research because it allows the ‘voices’ of the participants to show through as individuals and as a group. It also provides the foundation for developing the initial framework for analysis into something that better reflects the domain of inquiry.

However, analysis of this type is not without its limitations. The findings from this inquiry are inextricably linked to the time, place, and culture in which they take place. Therefore it cannot be claimed that these findings are automatically transferable to another place or culture.

4.4.5 Constructivism versus constructionism

Constructivism and constructionism are closely related but not the same thing. The ideal constructivist focuses on every detail as potentially interesting and assumes very little. The ideal constructionist on the other hand, accepts that a culture exists and the ground rules of the social setting exist but need to be understood.

The constructivist inquirer uses what Crotty (1998) describes as: “*A dialogue with the materials , interrogating all the heterogeneous objects, indexing their possible uses.*”(p.51) This approach, sometimes also referred to as ‘bricolage’⁵, where seemingly unrelated aspects of an inquiry are brought together by the researcher and participants in a self-reflexive manner that explains a phenomenon (Denzin & Lincoln, 2005). That is the researcher regards every component of the setting as potentially interesting and examines it to determine its usefulness. The constructionist inquirer, however, acknowledges that the participants have a shared understanding that is accepted as already part of the culture. For example, an established culture, a shared vocabulary, or a social hierarchy all contribute to the rules, norms, and memes of the wider social setting in which the inquiry is taking place (Crotty, 1998; Geertz, 1973; Patton, 1999, 2002).

In the social setting of organisational learning in the PSO multi-channel service delivery, the managers of the case organisations have an established organisational culture, that is itself embedded in a wider public service culture, organisational hierarchy and rules that the managers conform to. They also share a common vocabulary for their professional domains of expertise or organisational function. That rich social setting that influences how managers think about organisational learning indicates that a social constructionist approach to the research inquiry is appropriate.

4.4.6 Summary table of candidate paradigms

This discussion has highlighted five research paradigms. The following summary in Table 2 below has been adapted to include constructionism in an abridged form from Denzin and Lincoln’s (2005) original table. It summarises the paradigms in terms of the ontological, epistemological, methodological stances. In addition, inquiry aims, values, and goodness or quality issues are also compared.

⁵ The practice (often artistic) of repurposing and object of material in a way not intended by its original producers.

<i>Item</i>	<i>Positivism</i>	<i>Post-positivism</i>	<i>Critical theory</i>	<i>Constructivism</i>	<i>Constructionism (added, AS)</i>
Ontology	Naïve realism – “real” reality but apprehensible	Critical realism – “real” but only imperfectly and probabilistically apprehensible	Historical realism – virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallised over time	Relativism – local and specific constructed and co-constructed realities and experiences of the individual.	Relativistic, with some critical realism – specific co-constructed shared realities from multiple perspectives and experiences of groups or communities
Epistemology	Dualist/objectivist; findings true	Modified dualist/objectivist; critical tradition/community; findings probably true	Transactional/subjectivist; created findings	Transactional/subjectivist; created findings	
Methodology	Experimental/manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental/manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	Dialogic/dialectical	Hermeneutical/dialectical	
Inquiry Aim	Explanation: prediction and control		Critique and transformation; restitution and emancipation.	Understanding; reconstruction	
Quality criteria	Conventional benchmarks of “rigor”: internal and external validity, reliability, and objectivity		Historical situatedness, erosion of ignorance and misapprehension; action stimulus	Trustworthiness and authenticity, including catalyst for action	
Voice	“Disinterested scientist” as informer of decision makers, policy makers and change agents		“Transformative intellectual” as advocate and activist	“Passionate participant” as facilitator of multi-voice reconstruction	“Engaged facilitator” – aware of the culture and vocabulary of the group.

Table 2- Paradigm comparisons

4.5 The research paradigm adopted for this research

To meet the aims of the research question discussed previously, the leading paradigm for this research is **constructionism** because it situates analysis of managers in their interpretations of their shared realities and allows for the rich context of the group setting to show through while maintaining an appreciation for the individual interpretations of reality.

Organisational learning environments are subjective, complex, and involve abstract phenomena that cannot exist independently from the people that are enacting them (Crossan, et al., 2011; Murray, 2002).

The subject of the inquiry for this research involves learning in organisations, this is a social phenomenon rich in causal ambiguity (Barney, 1991). When combined with the multi-faceted nature of service delivery to public sector customers make constructionism a straightforward choice.

Exploring the organisational learning taking place in a multi-channel service delivery context taking place in public sector organisations does readily not lend itself to defining a-priori absolutes, laws, or identifying readily testable theory due to the potential for multiple ambiguities and interpretations by the people involved, so neither of the positivist approaches was considered suitable. Nor does the society or community involved call for emancipation or advocacy so a critical approach is not appropriate. Instead, the meanings derived are subjective, highly contextual and interactive. This provides a rich and panoramic viewpoint that can only be achieved by the qualitative constructionist approach.

4.5.1 *The ontological position for this paradigm*

Following on from the choice of paradigm, this research takes a ***relativist ontological viewpoint***.

Ontology concerns the nature of reality of being. Specifically, it addresses the knowledge claims about reality.

Positivists contend that there is one true reality – the idealist position. A positivist conducting a study may set up a tightly controlled experimental analogue study,

manipulating carefully only one variable while holding all other variables constant. The goal of the positivistic study is *etic* (non-participatory) in that it attempts to identify one objectively derived set of results (a true reality) that can be generalised. Similarly, a post-positivist researcher may use semi-structured, brief interviews of clients and may use multiple raters to identify a single approximate reality by using inter-rater reliability or consensual agreement of themes (Ponterotto & Grieger, 2007).

In contrast, constructionists believe there are multiple, constructed realities, that is, the relativist position. Instead of accepting a single true reality, constructionists believe reality is subjective and influenced by the context of the situation (Crotty, 1998).

Specifically, reality is defined by an individual's experience and perceptions, the social setting, and the interaction between the individual and the researcher (Ponterotto & Grieger, 2007). This research assumes that the managers involved have different perceptions of reality and construct a shared definition of reality.

The researcher describes but does not judge the validity of these perceptions. This study takes a relativist ontological perspective, the researcher cannot look for a single "truth" from the multiple realities of the participants or try to achieve external verification of the analysis because it does not matter if a different researcher looking at the same typed interview transcripts would find different themes because the reality is the one created through the participants relationship with the world around them. The 'rigor' of the study comes from the quality of the thick descriptions (Denzin & Lincoln, 2011; Lincoln & Guba, 1985).

A thick description illuminates the particular context of an attitude or type of behaviour. It does this in addition to the description of the behaviour itself. The analysis of an interview can focus on details to provide examples of broader concepts at work. When the data is presented as a case study the researcher interprets the findings as examples of the culture being explored (Geertz, 1973).

4.6 The research approach

In broad terms, social research has two dominant methods of inquiry methods: quantitative and the qualitative. The choice of methodology is typically influenced by the researcher's paradigmatic choices.

Positivistic inquiry is typically associated with quantitative methods and critical or constructive inquiry associated with qualitative methods. Guba and Lincoln describe this as paradigmatic hegemony (Denzin & Lincoln, 2005).

However these lines have become less distinct with “methodological agnosticism”, “paradigm wars” and other debates punctuating recent decades of social inquiry (Orlikowski & Baroudi, 1991).

4.7 Influential research approaches

Quantitative and qualitative approaches are contrasted in the sections below and a choice for the qualitative approach made and justified.

4.7.1 The quantitative approach

Quantitative methods address questions that can and should be examined empirically. In that case, emphasis is given to measurement of phenomenon in terms such as: quantity, amounts, intensity and frequency.

Quantitative researchers aspire to be value free. That is, they seek to adopt the role of an independent and objective observer who is not in any way involved in the phenomenon of interest (Denzin & Lincoln, 2005).

4.7.2 The qualitative approach

On the other hand, qualitative methods refer to empirical research designed to describe the experiences of research participants in a context-specific setting (Denzin & Lincoln, 2005).

Qualitative findings are generally presented in everyday language and use participants' own words to describe experiences. Qualitative researchers acknowledge that their participation in the research process has value and influences the research.

4.7.3 The approach selected for this research

This research uses a *qualitative method*. Both quantitative and qualitative methodological approaches employ empirical methods in the collection, analysis, and interpretation of the data gathered allowing for the gathering of contextually situated data.

Examining the learning that occurs in PSOs for envisioning, deploying and maintaining complex systems such as multi-channel service delivery systems is an ideal environment for the social richness and the broad illumination potential that the qualitative research approach offers.

Using a quantitative approach in this setting runs the risk of becoming excessively reductionist and has the potential to lose key insights by “focusing the spotlight” too narrowly.

As discussed in chapter three, the domain of inquiry is rich with opportunities for managers to build culturally based interpretations and make decisions with incomplete information based on feelings and experience. A quantitative approach requires a clear determination of what is being measured. This organisational learning context is inherently ‘messy’ and requires an approach that embraces that messiness and seeks to make sense of it without ignoring any aspect of it.

Consistent with a social constructionist report the researcher does not make claims that this research presents a non-negotiable theory of organisational learning or that this is the only way to conduct research of this type. Rather, it is intended that this act as a contribution to a continuum of knowledge.

4.7.4 The epistemological position associated with this approach

Epistemology addresses the relationship between the research participant and the researcher. This research uses a *subjective epistemological approach*.

In positivist research dualism and objectivism are emphasised. Dualism is the prevailing epistemology. The researcher, the participant and the topic are assumed to be independent.

The participant and topic are studied objectively using rigorous, standardised procedures. If the researcher influences the study in any way, the study is judged flawed. Replicable results are regarded as “true” and theory is something to be verified (Ponterotto & Grieger, 2007).

Post-positivists take a less constrained viewpoint but still advocate a modified dualism/objectivism stance. They acknowledge that the researcher could influence the research, but objectivity and researcher–subject independence guides the research process.

Both positivist and post-positivist approaches actively seek to remove or minimise values in the research process. The researcher seeks to remain emotionally detached from the investigative inquiry. Standardised, systematic investigative methods and controls are used to remove influence of the researcher on the participants or on the research process.

In contrast, constructivists use a subjective approach that asserts that reality is socially constructed. As a result the interaction between researcher and participant is central to describing the “lived experience” of the participant (Denzin & Lincoln, 2005).

Constructivists and constructionists maintain the viewpoint that the researcher’s values and lived experience are an integral part of the research process. The researcher should acknowledge, describe, and “bracket” their values, but not try to eliminate them (Ponterotto & Grieger, 2007).

Subjective interpretive research requires the researcher to be a critical component of the research process. The researcher is not able to be objective or impartial, but rather, is involved in an ongoing concentrated interaction with the participants.

The non-neutral stance of the researcher creates an obligation to acknowledge the impact their role of researcher has on the process of site selection, data gathering, analysis, interpretation and presentation of results (ibid).

In this research the researcher's background of business management, analysis, project management and consulting will influence how sites are viewed and the

sort of issues that are considered important. In that sense, the researcher took to the research preconceptions of an analyst and project manager having worked for a number of PSO's in New Zealand.

To offset any potential bias, particular attention is given to encouraging participants to use their own language, terms and descriptions, triangulation and care is taken to ensure that meaning is ascribed only after careful scrutiny of the data using coding and use of the data presentation tools of the research database.

The researcher's bias – the researcher could not pretend to be a blank slate in this research. His own experience and background as a state sector manager, information systems; practitioner and academic researcher affects the decisions made during the data selection, gathering and analysis and as had an influence on how the results are presented in this report. The researcher sought to mitigate for this bias by being truthful, seeking peer review of analysis and writing up stages, using triangulation strategies and committing to reflecting the voices and stories as the participants intended them.

4.8 The Research Method

This research methodology section describes the methods used to collect and analyse the data involved in this research. In keeping with the previous discussion, this research uses a case research method. The following discussion reviews case research and refines the approach taken.

Myers (1997) notes that ethnography, action research, and case research form the majority of qualitative methods in IS research. He also recognises the emergence of critical research in IS (Myers & Klein, 2011). This is consistent with IS moving from being a 'backroom technology' issue into a key component of the fabric of society.

4.8.1 Influential research methods

The following sections summarise a subset of the large pool of candidate research methods available. The following methods were considered for this research because of their relatively common usage in the IS discipline and some that are

not so common to IS were considered as well. The considered methods are summarised briefly below and their merits and weaknesses for this research are discussed. The selected method of social constructionist case study method is also introduced.

4.8.1.1 Ethnography

Walford (2009) cites Fetterman's description of ethnography as: "*the art and science of describing a group or culture*". Broadly speaking, ethnography describes, in their natural setting, over time, cultures, organisations or people within a frame of reference such as their customs or key characteristics (Denzin & Lincoln, 2005; Myers, 1999).

Ethnography takes a systematic approach to gathering rich data using immersion in a situation or society to give depth to the inquiry. Ethnography draws upon multiple data sources, quantitative and qualitative, to compose a "picture" or "tell the story" of a particular setting.

Ethnography is not suitable for this research, even though there is a clear ethnographic component involved because the domain of inquiry includes the people and groups involved but is not solely about them. It is also about organisational learning as an organisational phenomenon and service delivery in the New Zealand public sector.

It is also about the integration of technology and management systems. So, while ethnography would address the people and groups aspects well it is not sufficient to address the other dimensions. Grounded theory and case research are considered next to establish which one is a suitable approach for this research.

4.8.1.2 Grounded theory

Grounded theory aims to isolate factors and build theory through a combination of inductive and deductive reasoning (Strauss & Corbin, 1998). Ideally, grounded theorists start their inquiry without preformed theoretical propositions and are guided by the subjects and phenomenon they discover (ibid).

Cresswell (2003) describes grounded theory as having two primary characteristics: the need to do constant comparisons of the data with emerging categories and theoretical sampling of different groups in order to expose similarities and differences.

Grounded theory would be a good option if there was no suitable lens available through which to examine the phenomenon. Rather, this research seeks to build on an established platform rather than begin with the ‘clean slate’ of grounded theory. To this end, case study research approach is considered in the next section.

4.8.1.3 Case study research

Case research is appropriate for situations where cases that represent a population or group can be identified. In the setting of this research this is the managers of multi-channel PSO's. In addition, the cases need to be sufficiently similar in their treatment of a phenomenon to justify studying them as a collective. The label ‘case study’ is used in many different methodological approaches.

Some case study methodologists stress the importance of following hunches when in the field and defining cases as you go, others advocate early identification and bounding of the case and tend to see case definition as a methodological means for coming up with findings rather than a finding in its own right.

Idealist researchers and methodologists believe that cases pre-exist as empirical units out there waiting to be studied. In contrast, relativists argue that researchers create cases through interaction and empirical investigation. That is, cases do not exist until researchers construct them, or co-construct them with their respondents (Patton, 2002).

Bogdan and Biklen (2007) suggest that when proposing a study, researchers should address issues surrounding where the study is to be done, who the subjects are, how the subjects are determined, time for each activity, data that will be included, and how analysis will be conducted. They also suggest that when determining who the most important subjects are or the boundaries of the cases, researcher “intuition” and the research questions should be the guide.

Miles and Huberman (1994) suggest that the researcher start intuitively and identify the “heart,” of the study and build outward from there. “Think of what you will not be studying as a way to firm up the boundary: *“Admit that the boundary is never quite as solid as a rationalist might hope”* (p. 27). Although they recommend defining the case as early as possible, they also remind researchers that sampling will further define the case.

Constructivist/constructionist methodologists suggest that cases are what you make them, and what you make of them depends on the theoretical perspective and framework that grows out of your unit of analysis. That is; the “heart” that Miles and Huberman (ibid) discussed. Constructivist/constructionists go further, arguing that cases are socially constructed and co-constructed between the researcher and the respondent. In this way, cases are not fully defined or bounded until data collection and analysis are finished.

Becker (1992) suggests that such strong preconceptions are likely to hamper conceptual development. He asserts that researchers will probably not know what their cases are until the research, including the task of writing up the results, is virtually completed.

Baskerville and Wood-Harper (1996) takes this inductive approach to the next level by arguing that researchers are in a sense incapable of making meaning of social phenomena unless they understand the boundaries of these events through the eyes of the people they study. Only through a co-construction of meanings with respondents can researchers truly interpret what it is they have found. He provides a more specific example of this approach to defining and bounding cases in his discussion of research on communities. They also note that researchers are entering “moral” or “normative” communities where distinct norms operate and shape meaning. He argues that to interpret these communities, researchers must understand the normative definitions of “objective” concepts such as time and work and the need for contextual knowledge to interpret statements, ideologies, and referents to understand why they act as they do; to identify the impetus for particular actions.

Interpretive validity results from researchers' inference from the words and actions of participants in the situations studied—an inference that may be clouded if respondents distort or conceal their views. The meanings and constructions of actors are part of “the reality” that an account must be tested against to be interpretively valid (Patton, 2002).

4.8.1.4 Action research

Action research does not accept the idea of an objective, value-free approach to knowledge generation. Instead, it favors an explicit politically, socially engaged, and democratically involved approach.

In addition, the action researcher acknowledges that by working collaboratively with others, their understanding and values evolve in response to the research. This leads not only to community and organisational changes, but also to personal changes in the action researcher. Action researchers reflect on those experiences, describing the experiences as part of their findings (Avison, Lau, Myers, & Nielsen, 1999; Baskerville & Wood-Harper, 1996).

The collaborative relationship between the researcher and the practitioners typically takes the form of a consultative relationship. The cycle involved is usually an incremental and iterative process of: diagnosis, action plan formulation, action, evaluation, and documentation of learning. (ibid)

4.9 The research approach used for this research

As a result of the previous discussion case study research approach is the chosen approach for this study. On one hand, this research is concerned with how managers go about configuring their service teams to maximize their organisational learning opportunities. On the other, this research is also concerned with why the managers value certain aspects of organisational learning in some situations but not in others. Yin (1994) provides the following checklist for when a case study design should be considered:

(a) The focus of the study is to answer “how” and “why” questions

(b) You cannot manipulate the behavior of those involved in the study

(c) *You want to cover contextual conditions because they are relevant to the study*

(d) *The boundaries are not clear between the phenomenon and context.*

The objectives of this research are consistent with this approach. In the next section the unit of analysis is considered.

4.9.1 Unit of analysis

Miles and Huberman (1994) define a case as: “a **phenomenon** of some sort occurring in a **bounded context**” (p.25). This study analyzes the collective learning that takes place amongst managers [the phenomenon] of service delivery teams that use service delivery information systems in PSOs [the bounded context].

4.9.2 Addressing the research questions with the cases

Yin (2009) asserts that research questions fall into *who, what, where, how and why* categories, and that who and where questions effectively distil into a single broad class of exploratory questions and that how and why into another explanatory class.

The research question for this research is in the **exploratory** class, providing rich and contextually situated case selection criteria. Case selection is based on public sector organisations as social systems provide a contextual boundary for selecting managers who are creating and operationalising organisational learning in their service delivery practice. The virtual and physical channels provide a systems context that the organisation learning is focused on.

The context and culture of the case can be reported against the backdrop in which they originate so that a contextually relevant commentary can emerge (Yin, 1994).

4.9.3 Role of the theoretical lens

The theoretical lens for these cases is the adapted capability perspective of organisational learning discussed in chapters two and three. This lens provides

the basis for the interview protocol that provides the means to explore the culture of the managers operating in the organisational context of New Zealand PSOs.

However, if the theoretical lens is not intended as a boundary defining device instead the intent is that the researcher and participants co-construct their interpretations in a paradigmatically consistent manner. In this setting they are using the protocol as a starting point that could be likened to a travel guide book for a constructionist inquiry rather than as a fixed itinerary.

4.9.4 Multiple-case research

The cases for this research are the groups of service delivery systems managers that play a part in the definition, operation and ongoing maintenance of the service delivery functions of the organisations they work in. The organisation forms one boundary of each case, the service delivery function another. In the multi-channel organisational setting it is common for multiple managers to be involved in aspects the service delivery function.

Two cases were selected from three different parts of the New Zealand public sector; the non-university tertiary education sector, central government agencies and local government agencies.

The service delivery information systems lifecycle is unique to a particular organisational setting but has a sufficiently similar characteristics, as identified in the literature review section, to justify a multiple-case approach (Eisenhardt, 1989; Yin, 1994)

In this multiple-case approach the participants described their learning experiences and actions and the experiences of the teams they manage. The language of organisational learning capability acts as a starting point for explaining the common learning characteristics that individuals and groups go through when engaged in service delivery information systems development and use. Dube and Pare (2003) stated four reasons for case research being well respected in IS research this is illustrated in Table 3 - Dube and Pare's criteria:

Table 3 - Dube and Pare's criteria

Dube and Pare's criteria	Relevance to this research
The shift in focus for IS research from technical issues to organisational issues.	Learning amongst managers of service delivery information systems embodies key organisational issues.
By reporting on real-world IT experiences, case research reflects accurately the rapid change in IT and organisations.	Service delivery systems are affected by change in organisational dynamics and stretch the boundaries of IT technology.
The holistic nature of case research helps to explain the complexity of the interplay between people, technology and organisations.	Multiple delivery channels and the underpinning service delivery systems incorporate complex physical and virtual channels involve a dynamic systems internetwork of people, organisations, and technology.
Case research is well suited to exposing new ideas, reasoning, opportunities, and challenges that managers and IT specialists face.	Organisational learning amongst managers of service delivery systems in public sector organisations is a potentially new area for identifying new organisational and systems theoretical constructs.

4.10 Selection of cases

Selecting the types of case organisations to represent multiple channel service delivery cases involved preliminary discussions with senior PSO leaders and representatives from the State Services Commission (the NZ public sector governance agency). From these conversations, it became apparent that some case settings shared contextual similarities and others were operational different that direct comparison would not be relevant. As a result, it was decided by the

researcher that grouping the results into three contextual dyads would make sense in the subsequent analysis.

Dyad one – was made up of two central government information provision and management agencies.

Dyad two – was made up of two territorial authorities (also known as city councils).

Dyad three – was two non-university (polytechnic), tertiary education providers.

In addition, the participant cases met the following selection criteria:

- (i) The service delivery functions of the organisation had at least one physical and one virtual channel with a clearly identifiable service delivery system.
- (ii) Have a clear service fulfillment mechanism involving service agents and a management structure for supporting and defining the systems those agents use in the delivery of their service functions.
- (iii) The physical and virtual channel technology and service delivery systems were developed and operated by the case organisation or by in-situ vendors (i.e., not completely outsourced to a 3rd party service fulfillment agency).

4.10.1 Data collection and analysis procedures

Case study research uses multiple data sources, a strategy which enhances data credibility (Patton, 1990; Yin, 2003). In case study research, data from these multiple human sources are converged in the analysis process rather than handled individually.

4.10.2 The interview protocol

Semi-structured interviews were carried out from the multiple data sources using an interview protocol. The protocol ensured that similar topics were covered in each of the interviews.

The protocol was, however, flexible so that the interviews were able to explore both the individual perspective and their unique organisational situation. The

researcher has a background in PSO systems analysis, project management and requirements planning. This prior experience and common public sector vocabulary facilitated the use of open interview style that encouraged participants to provide candid and open responses. The interview protocol also provided the basis for the coding schema used in the analysis chapters.

As mentioned earlier, this protocol was a starting point rather than an itinerary. For example, some managers chose to spend a lot of time in one area and answered aspects from multiple dimensions simultaneously.

The following sections describe the interview protocol used for the semi-structured interviews.

4.10.2.1 Experience

The initial part of each semi-structured interview involved a background discussion that was designed to help participants relax by talking about their own background and helped the researcher to explore how they came to be working where they were and what their depth of experience in the multi-channel service delivery domain had been.

What is your role at <<case organisation>> (or business unit)? ...Could you describe for me your experience with the (service related) information systems that you use to support your role?

Having established an understanding of the person's current role, and what previous roles they had held with the organisation the conversation moved on to what their educational, vocational and professional background had been and how they came to be working with service delivery systems.

4.10.2.2 Service Delivery Systems

This part of the interview protocol opened the discussion about the specific service delivery systems that the manager was involved with. It created the opportunity to open a conversation about the person's role in the design and operation of the systems and explored how involved or not the manager felt they were with the systems

Can you describe for me the service related systems and processes that <<case organisation>> uses for interacting with new and existing clients? ...How would you describe your role in the design and operation of the systems that help deliver these service outcomes?

4.10.2.3 Learning orientations:

The following questions are focused on exploring the learning orientations of the organisation and the managers. These are aimed at understanding how learning is occurring and exploring with the participants how they value those aspects.

Knowledge sources - *How do you think <<case organisation>> values knowledge about service delivery practice that is generated within <<case organisation>> itself? ..Can you think of an example where internal or external knowledge has been used and recognised? ...Do you feel that these knowledge sources are valued equally? Or, is there a tendency to favor one source over the other?*

Product or process focus - *How does <<case organisation>> accumulate knowledge about end results and outcomes?*

Documentation Mode – *How does <<case organisation>> build up and develop individual knowledge and skills or team and socially constructed knowledge about delivering services?*

Dissemination Mode - *Can you describe how <<case organisation>> encourages (or inhibits) the dissemination of ideas about service delivery?*

Learning Focus - *Does <<case organisation>> favor learning that supports the continuance of existing practices (incremental learning focus) for service delivery,*

Or,

Does <<case organisation>> encourage testing of the basic assumptions (transformative learning focus) from that the systems were originally developed from?

Value-chain Focus (Design or Deliver) - *Does <<case organisation>> create service value by a "design and make the solution" (i.e. engineering focused outcomes) approach*

Or,

Does it create value by a "sell and deliver a predefined artifact" (i.e. marketing driven) approach?

Skill Development Focus (*Individual or Group*) - *Does <<case organisation>> value team learning about service delivery systems over individual expertise development?*

4.10.2.4 Facilitating Factors

The following questions formed the facilitating factors component of the interview protocol. These questions are aimed at exploring why organisational learning is taking place in the organisation and understanding what the managers feel is important to them about these aspects.

Scanning imperative - *To what extent does your team acquire information about service delivery from beyond the groups own knowledge base?*

Performance Gap - *Is there a shared perception in your team of a gap between actual service delivery performance and a desired level of service delivery performance?*

Concern for Measurement - *Does your team have a shared desire to understand key factors of the performance gap and agree how it is to be measured?*

Experimental Mind-Set - *How would you describe <<case organisation>>'s attitude toward 'playing' with new ideas?*

- *How is failure of untested initiatives treated by <<case organisation>>?*

Climate of Openness - *Are problems, errors, and lessons shared or suppressed in your team?*

- *Is debate and challenging of norms acceptable or encouraged?*
- *Does such debate result in changes to service delivery systems?*

Continuous Education - *Is there clear support for ongoing education at all levels of the team?*

Operational Variety - *How are differences in (pluralistic) competence and variety of methods, procedures and systems valued within your team members?*

Multiple Advocates - *Are new ideas and methods about service delivery welcomed and championed, regardless of where they originate in the <<case organisation>> hierarchy?*

Involved Leadership - *Does the leadership of <<case organisation>>:*

- *Engage actively in articulating a shared vision of service quality?*
- *Interact with members of the service delivery group*
- *Become actively involved in educational programmes about service delivery?*

Systems Perspective - *Are systems problems seen in terms of their relationship with other departments or parts of <<case organisation>>?*

- *Are they viewed systemically?*
- *Are the group's needs aligned with the wider organisational goals?*

The interview concludes with an opportunity for an open conversation that allows the participants to raise any aspects that they feel they would like to change or go into that they did not cover in the interview.

Concluding comments – *Is there anything that this conversation has sparked that you would like to discuss or go back to now that we have completed the discussion questions?*

4.11 Role of the researcher

The researcher in a constructionist paradigm has a role to play in the dialogue with the participants and choices to make in the subsequent transcription review and presentation of findings.

The researcher in this research has a background of being a public sector manager for more than 10 years followed by being an information systems provider to the public sector for another 10 years.

This prior experience brought advantages in terms of shared vocabulary, domain experience and empathy with the situations being described. It also required caution, because the same attributes also had the potential to overly influence which findings were deemed interesting or relevant.

Being aware of the potential hazard this presented was a first step and was backed up with constant vigilance and attention to giving an ‘honest voice’ to the participants was necessary to mitigate for this risk in addition to triangulation between interviews and data confirmation actions such as documentation checks.

4.12 Issues and challenges faced during the data gathering

The following points summarise the issues and challenges faced by the researcher in carrying out this research

“Research exhaustion” - the Wellington public sector was “over researched” with multiple universities and technical institutes vying for limited pool of busy public service managers to study.

Unwilling participants – there were some contractors and consultants who were unwilling to participate in anything that might be perceived as criticism or scrutiny of their customer. Despite multiple assurances of confidentiality and non-attribution of results, two consultants withdrew on the day; another withdrew after reading the protocol and consent material. Three more declined to participate following initial telephone contact.

Leadership engagement – For some agencies senior managers were disinterested or unwilling to “disclose processes” or open their department to what they regarded as unnecessary scrutiny.

Climate of change – Major local government changes, reforms and restructuring was taking place at the same time as the research. The climate of uncertainty around these local government reforms in the wake of the 2008 general election made some managers nervous of doing anything that drew attention to them or their functions. Five out of the six participants at one of the local government sites were made redundant or had resigned within six months of doing the interviews.

Education provider funding cutbacks – one of the education case organisations restructured during the interviews resulting in the research sponsor taking ‘immediate retirement’ – another participant at that site withdrew their participation after the interview. While another didn’t show up or accept requests to reschedule the interview.

4.13 Primary data: the interviews

Individual participant interviewing was the primary data collection method used in this research. To encourage participants to be candid and open in their responses it was decided that the participants and the organisations would be obfuscated by using pseudonyms for participants and the organisations and assured of confidentiality through the obfuscation of the organisations identity.

The following section describes the interview process.

4.14 The interview process

Twenty nine interviews were conducted between June 2008 and May 2010. The interview process for each case site involved the same process of seeking senior management support for the research.

When a positive response was received, this was followed up by conducting a preliminary site visit to explain the nature of the research and discuss potential participants. The support of a prime sponsor or contact person was sought to help arrange interview times and venues.

Participants were provided with copies of the interview protocol, a brief research project description and the informed consent form (see Appendix B) at least a week in advance of the interview taking place. Interview appointments were set up by email either directly or through the sponsor.

Interviews were conducted in meeting rooms or the participant’s private office. The environment chosen was checked as suitable for a recorded conversation and a high quality digital recorder used. Although one interview was interrupted by an earthquake, another by a noisy morning tea shout in an adjacent room and another by a fire evacuation drill. Each of those interrupted interviews was resumed as soon as the distraction had been resolved.

The interviews consisted of the following steps:

The administrative step – this step was where the consent form was explained including the chance to opt-out, and, on agreement the consent form was signed.

At this point another opportunity to review the interview protocol document was given. It was also explained at this point that their own interview transcripts would be made available for them to review and revise if they wished to.

The background step - the recorder was turned on at this point and the conversation commenced with the participant describing their background in the organisation, a short discussion of their formal and informal qualifications and their overall understanding of service delivery systems.

The organisational learning framework step - worked through the seven learning orientations and ten facilitating factors as starting points for the conversation.

The open conversation step - once the interview protocol elements had all been addressed to the best of the participant's ability or willingness, an opportunity to raise any new thoughts or ideas was presented. At the end of this step the recorder was turned off, the participants were thanked, a small gift provided (a bottle of wine or a movie voucher), and the interview concluded.

The transcription step - Detailed transcripts of the interviews were prepared from the interviews – the initial transcribing was carried out by a professional transcription service with an attending non-disclosure agreement.

The researcher then reviewed and re-transcribed sections where technical descriptions were transcribed incorrectly or superfluous material had been captured. The revised transcripts were then added to the research database along with the original audio files.

Where possible, interview transcripts were provided to the participants for review. Three participants provided further comments and clarifications subsequent to the interviews.

4.15 The interview data

The twenty nine interviews were conducted across the six case organisations. The shortest interview was approximately forty five minutes and the longest approximately one and a half hours (see Appendix C for a list of interviews and durations). However, the interview duration had little bearing on the richness of the results; some of the relatively short interviews contain some of the richer insights.

All the interviews were recorded on a high quality digital recording device. To back up the interview data a short reflective memo was prepared by the researcher in the case database after each interview to act as a reminder of emerging themes and points to follow up.

In addition to the interview data – publically available background data such as the organisational websites, press statements and public consultation documents were reviewed to gain a good general knowledge of the organisations business mission and to achieve a general appreciation of the domains of expertise involved with the participants.

In keeping with Yins (1994) recommendations for multiple data sources, other data was used in the form of perusal of annual reports and public data sources to confirm the reported issues and events that respondents referred to. For several of the organisations pre-existing case studies were found that examined their previous organisational and systems endeavours. These were perused for triangulation and general background purposes.

4.16 The case study database

In order to collect and manage gathered data in a form for analysis and data display a case study database was used. The database allowed for flexible and reliable use of data (Huberman & Miles, 1994). Yin (1994) recommends case study databases for interview transcripts, field notes and documents and as a means of storing partially processed data and material developed during analysis.

The use of a case study database contributes to the reliability of the research. This idea was extended to include the original audio files so that the analysis

process could include listening to the actual interview and where necessary coding of the audio files was also possible, although in practice, this was not done extensively and the transcripts remained the primary record.

NVivotm Version 8 by QSR software, a case materials database and software package was used to store and co-locate all audio files, transcripts and field notes.

Transcripts were indexed with regard to organisation and individual interview participants to allow for flexible access to the data. The software allows for coding, reporting and data display mechanisms to be used for the data analysis.

In addition, adjunct applications in the form of spreadsheet software (*Microsoft Exceltm*), graphics tools (*Microsoft Visiotm*) software was used to help with data reduction and display.

4.17 Data analysis and presentation of results

Analysis of qualitative case research data involves reflecting individuals' reported experiences, and the researcher's interpretation based on the shared experience of articulation. Miles and Huberman (1994) refer to good data analysis technique as providing sufficiently "thick" descriptions and using sound methodological process.

The data analysis process in a qualitative study is seen as involving three overlapping sub-processes: data reduction; data display; and conclusion drawing and verification.

Data display helped to organise emerging reductions so that emergent themes and conclusions could be scrutinised and evaluated – this was also an iterative and incremental process. Once the data was reduced and displayed the researcher could begin to induce meaning and draw conclusions.

Data reduction involved systematically reducing the data into categories; summarising, coding and identifying themes. Initially the seven learning orientations and ten facilitating factors of organisational learning capability were used to help guide, but not to constrain, the data reduction process.

Data reduction began early and involved an iterative data analysis process between data collection and analysis (Eisenhardt, 1989). This also involved reviewing data as it was collected and being sensitive enough to make adjustments to the data collection strategy to accommodate areas where more or less data may be forthcoming. In addition, the triangulation of findings by comparison with other participants, documentation, and pre-existing research strengthened the data reduction process.

This cycling back and forth between data collection and analysis allowed for inductive theory building and abductive theory review of that took place as a result of developing a deep understanding and checking (Carroll & Swatman, 2000; Eisenhardt, 1989; Yin, 1994).

Figure 8 – Initial cyclic case approach adapted from Carroll & Swatman (2000)

Along with the data collection, display and reflection processes outlined above, existing literature and theory was used at the confirmatory stage of the data reduction iterations.

This provided the researcher with an opportunity to consider whether there is emergent conflict or agreement with the existing literature. Both outcomes are regarded as potentially interesting (Carroll & Swatman, 2000; Eisenhardt, 1989).

4.18 Development of codes and process of coding

Codes are labels assigned to related ‘chunks’ of data collected during the research process (Huberman & Miles, 1994). Codes allow the researcher to organise data into categories for data reduction and to group similar data into themes that illustrate a particular point or construct in the data display process.

However, codes are more than an indexing system. In a constructivist/constructionist study the analytic codes and the process of coding involves the researcher’s interpretation of the data which makes the researchers interpretations and choices an integral part of the analysis process.

Codes are selected and developed through two main coding strategies:

Open coding - Where the researcher develops the codes as part of the data reduction process based on points of interest, potential interest or special insights obtained from reviewing the data (Huberman & Miles, 1994). An open coding process allows the researcher to be open to new themes and patterns.

Closed coding - Process where the codes are developed from literature a pre-determined framework so that a candidate coding scheme exists before the data is reviewed. A closed coding scheme allows the researcher to be more focused and integrated with existing literature.

This research employed a mixed coding strategy, beginning with a closed coding schema and allowed for open codes to be introduced as the data analysis progressed (Huberman & Miles, 1994). This strategy allowed for the empirical themes of the organisational learning literature that informed the interview protocol to be carried forward into the initial data analysis.

This initial coding scheme was then used as the common starting point to code the data from the six case organisations to allow the researcher to identify additional codes and revise the initial schema in light of the actual findings.

The early analysis was completed through individual case write-ups for each case. Case write-ups are a recommended step to help the researcher cope with a large amount of data and to help connect with the cases on an individual level before moving on to cross-case analysis (Eisenhardt, 1989).

4.19 Cross-case analysis

Cross-case analysis is the systematic comparison of the individual case organisations within a dyad from which patterns and relationships are identified (Huberman & Miles, 1994). In the research the cross- case analysis is done at the level of the dyad to explore aspects of organisational learning by the managers who shared a similar organisational context.

4.20 Cross-dyad analysis

Because of the logical grouping of cases into dyads the opportunity arose to carry out an additional layer of analysis across the dyads where the managers shared a public sector institutional context and organisation culture even though their individual organisational missions were fundamentally different.

4.21 Analysis from a theoretical perspective

The remaining step in the analysis was to review the findings in term of the theoretical lens with a view to identifying opportunities to review the theoretical lens and offer new insights into how that lens could be adapted for future empirical research.

4.22 Influence of service quality

The data gathered and subsequent analysis did not seek to judge the managers involved in the research in terms of whether or not they were actually achieving delivery of high quality services or complying with any objective standard of quality. The absence of such an objective judgment makes it impractical to use the original DiBella and Nevis framework as a diagnostic instrument for assessing quality of services for these cases and these findings do not attempt to make any assertion to that effect. The revised framework contains elements that have the

ability to address this issue. To that end, a future research direction could use service quality as a criterion and evolve the framework even further.

4.23 Chapter summary

This chapter has presented the research plan and described the analysis approach. This has set the scene for the remaining chapters of the thesis that deals with the products of the research.

Chapter 5 Dyad 1 – TrackTech and TechSci

This findings chapter is presented in three parts. For purposes of confidentiality, the first case is known as TrackTech, and the second is known as TechSci. The Findings from each case are presented in the order of the analytical lens headings with the seven learning orientations presented first and the facilitating factors following. The same convention is followed in the third part which is the cross-case analysis for the chapter.

5.1 Introduction

The cases described in this chapter were situated in two central government agencies. The TrackTech case was a business unit within a larger multi-agency department that had its own general management and operational management but shared its strategy and leadership functions with the wider government department, including its stake-holding minister of the Crown. The second agency, TechSci was a standalone government agency that has its own CEO, senior leadership team, and governing minister of the Crown. The cases although operationally different are functions of central government and share many common service characteristics and challenges. As a result the results are analysed as a dyad to explore those common aspects before moving on to a wider analysis of the multiple cases at a cross dyad level.

5.2 Case1 - TrackTech

TrackTech’s mandate came from the Crown in the form of governing legislation. The mission of the agency was to acquire, package and verify essential civil data that was used by individual citizens, other Crown entities and commercial organisations to verify and authenticate people and events. They viewed their data acquisition and processing functions as transactional “*widget*” processing and offered data retrieval and presentation products as their core services along with certification mechanisms to provide veracity to users of the documentation.

TrackTech leadership viewed its service delivery as primarily a process-oriented workflow business. They responded to triggering events such as a request from a customer that initiated a data creation, update or retrieval activity that progressed

through several operational stages to assure authenticity and fitness for purpose culminating in an information artifact – usually a certificate of record that was provided to the customer.

TrackTech was a relative newcomer to computerisation and automation in its normal operations. Prior to 1998 most of their systems were still predominantly centered on manual records and were highly labour intensive. Since that time, a steady programme of evolving automation had taken place beginning with the database, then workflow automation and latterly the introduction of online service interfaces had been undertaken. Not every information systems project they have embarked on had been entirely successful, but overall, they had moved to being an online information centric organisation in a little over a decade. By being relatively late adopters, even in New Zealand government IT terms, they had been able to “leap-frog” several generations of technology. However, this had also meant they leapt over several generations of experiential learning opportunities.

At the time these conversations took place in late 2009, TrackTech, was experiencing pressures associated with the New Zealand government’s drive for greater efficiency and downsizing in the face of the looming global financial crisis.

5.2.1 Manager Roles at TrackTech

The General Manager (GM) had responsibility for the day-to-day operations of the business unit and was the statutory administrator of the data repository.

Team Leader 1 (TL1) - was responsible for business support management including identifying shortfalls in business processes:

“I’m sort of caught in the middle so anything that’s not captured somewhere gets dumped on my plate” – TL1

Team Leader 2 (TL2) - was a colleague of TL1; she had a preference for external communications and looked after the customer group consultation processes:

“I tend to do more with the [customer groups] and as part of that, quite regularly go out to meetings with another colleague and spread the word [about online services]” – TL2.

E-business manager (EBM) - looked after the e-business group, she described her role as: *sitting between the business and the IT department*” - EBM to maintain and define online channel information products.

The Business Analyst (BA) - sat alongside the managers above and provided systems advice and services to implement changes to systems and business processes:

“I work on projects to implement changes to systems or business processes and do things like documents, current and future business processes and elicit requirements for change that the business wants.” - BA

5.2.2 *Systems experience at TrackTech*

As a group, the managers at TrackTech were not highly skilled in systems technology subjects. However, having gone through several iterations of systems lifecycle moving from manual to online services they were feeling increasingly comfortable in using their domain knowledge to achieve their service goals. The following statement characterised the attitude of the group to their IT skills:

“When I first started here back in 2005, I knew my knowledge was lacking, my view at that time was “Well I don’t have to be an expert, as long as I understand the concept, it is for others to make that concept come to life” ...I think you need a bit more knowledge than that, but you don’t need to be an IT expert.” - GM.

The managers had all attended in-service short courses on IT use and were comfortable attending meetings about systems change and development.

5.2.3 *Service Delivery Systems*

In a broad sense, TrackTech was a one-of-a-kind service. Each nation or self-governing state has only one data repository of the kind that TrackTech are stewards of. As a result, they viewed themselves as the local experts in the area.

5.2.4 *The nature of TrackTech's customers*

The majority of TrackTech's customers were private individuals making requests for personal information. In addition, they also received a number of requests from health and welfare professionals and other government agencies.

5.2.5 *Organisational learning orientations at TrackTech*

Knowledge Sources – For the managers at TrackTech, internal knowledge sources was the dominant mechanism for acquiring and developing new thinking and sharing experiences:

“We encourage internal thinking the department prefers ideas developed, encouraged, developed and implemented internally. I can't think of one occasion in the last five years that we have put in a new initiative that has been the result of external advice or ideas.” – GM.

They noted that the external voice was recognised but in the form of policy and stakeholder analysis that took place at a different organisational level:

“Very much it [knowledge] is internally driven – although we do try and draw upon external sources as much as possible like government guidelines and the feedback from customers.” – EBM.

The noted exception to this was that when TrackTech began its multi-channel transition in 2004 they had to rely more on external expertise about how to implement online services. However, as they had been through the systems lifecycle several times they became increasingly comfortable with their own expertise and felt capable of doing system definitions and implementations in-house that would have previously been contracted from consulting services.

Product or Process Focus - According to some managers, the value placed on quantitative performance measures could potentially have a negative impact on their customer service outcomes. They observed that if they met their numeric targets they were often regarded by senior leaders as successful regardless of the customer perception of the services received. The managers at TrackTech had learned that in-practice these measures were poor determinants of service levels

but continued to report on them because that met the senior leadership expectation:

“We are numbers driven...our standards of service performance, are all quantitative and they rule everything we do. I don’t think we measure ourselves in the right way...We worry about the solution and then about what caused the problem... but I am more interested in how it happened.”
– GM.

They reported that the ways in which the organisation responded in a service failure situation highlighted the need to be aware of the impact on customer and stakeholder perception:

[when talking about service failures] we want to find out what happened so it doesn’t happen again, to put an end to it... it’s about minimising damage to our public image and to make sure we’ve got our stakeholders confidence, and our customers. – TL1.

In contrast, the operational reality of taking a ‘what happened’ orientation in a busy environment meant that opportunities for reflection (the ‘how’ orientation) did not always happen even when there was awareness that understanding the ‘how’ would have been the better response:

“The focus is on ‘what happened’ and not enough focus is put on ‘how it happened’. We find that a lot of mistakes get repeated because something happened, [the question is asked] what happened? – [the managerial response is] just fix it – don’t worry about the source of it and how it came about.”- EBM.

Overall, these perspectives accumulated into a tendency to favour product over process for the TrackTech managers.

Documentation Mode - The managers described the knowledge preferences in terms of a tacit knowledge or apprentice style building up of team capability. At TrackTech people did not come from doing the same job in another organisation. As a result, there was a strong focus on building internal capability and a favouring of the public documentation mode:

“We have a team culture of building up knowledge so that anyone can do anything within the team – it’s a deliberate policy requiring everyone in that team to be able to be given any task that team does so I started on a deliberate process of making sure everyone in each team could do every job” – GM

Having this collective knowledge base was regarded as important for the team learning. However for some managers, the specialist expertise residing with individuals was also regarded as important for some high-stakes activities:

“In some areas we do have experts whose knowledge is cherished, ring-fenced and protected. They are very high risk areas where the rules are legislated explicitly and the ramifications of getting it wrong are very public”. – GM.

In this setting the focus of the documentation mode shifted from explicit knowledge of how to achieve an activity to a focus on recording explicitly who was the ‘go to person’ for a particular service action. Some managers particularly valued documentation mode as a means of providing breadth of capability in the service teams by valuing personal skills of the team and translating them into team capability:

“We have our own roles but we keep ourselves knowledgeable enough about each other’s roles that we can step into each other’s shoes.” – EBM.

Dissemination Mode - TrackTech had a preference for defining activity as projects so a lot of the managers’ discussion about the dissemination of learning used the language of projects. The managers had adopted formal methodological approaches to project definition and control. This preference for formal control over budget and outcomes meant systems ideas were disseminated at management and governance levels in a structured and formal manner arising from discussions held at steering group meetings:

“We meet once a month as a steering group to oversee the progress of projects. The discussions can be quite organic but it still takes place in the formal meeting.” – GM.

Over several iterations of their systems life cycle, the managers had become confident knowing what they wanted to achieve from their service delivery systems projects and became increasingly comfortable that they knew how to ask for it. They had a formal business sign-off process in place with a defined focus on what the business wanted to deliver:

“In the past, we wouldn’t have had so many meetings to nail down requirements; we would have just let the IT people build it...the online systems [at TrackTech] are still only about five or six years old, we’ve got a lot more experience now. – TL1.

At the operational level, the TrackTech managers relied on a corporate-scale intranet for dissemination of policy and process. Some of the managers described the intranet as taking too much of a one-size-fits-all approach:

“The intranet is unfriendly and unintuitive so a lot of people don’t even go there.” – TL2.

They felt that a domain-specific knowledge repository linked more closely to how they actually worked would have been a better alternative.

Learning Focus - Capturing the explicit knowledge of individuals was regarded as a collective resource for future use and supportive of existing practices that was regarded by the managers as something of an ideal but impractical in practice concept:

“Our personal knowledge and skills are valued by the organisation and it’s lovely to think about putting it all down in writing but it’s never ever going to happen, just because it makes sense to do it doesn’t mean it’s possible. – TL2.

Standards and best practice were used almost synonymously amongst the managers when discussing facilitating group learning that encouraged explicit documentation of policy and procedures (standards) to maintain best practice (competence):

“There’s a push to make sure people follow the process and procedures that’s been approved around policy and legislation. Then we know

they're following the best practice and picking up on the learning that has gone before. – TLI.

An appreciation of the difference between explicit and tacit knowledge was not apparent:

We've got policies and procedures online now which have moved us away from people having a stagnant book on the shelf to putting our procedures online in an electronic form and it's now accessible". - EBM

The clear preference was for making incremental changes that used continuous improvement. This was seen as a micro-scale activity at TrackTech and large scale change was something that was only initiated by senior staff while the service agents themselves were encouraged to think and act locally:

On a very small scale we encourage staff to say 'there is a better way of doing this' – we say: discuss it with your team leader, the team leader will then make the decision. – GM

Value-chain Focus - There was a strong preference amongst the managers towards using pre-engineered service delivery solutions that focused on the repeated production of what they called “widgets” (their information products):

“Most often we have the solution in mind and then design and build around that solution.” – GM.

This was, at least partially, due to TrackTech being a function that was governed by Crown legislation, so the room for innovation and variation was finite:

It is very easy to suffer from the dominant player in the marketplace mentality.” – GM.

Managing the value chain of those information products required a fine balancing act between commercial imperatives, cost recovery and the public service duty felt by the managers around providing the correct degree of openness to government held data:

“We are restricted by legislation, the need to earn revenue and the public needing to access [free or entitled by law] information as well, it is that fine balance.” - GM

Skill Development Focus – For the managers at TrackTech, group learning was supported as the basis for their team practice. However, they also recognised that some individuals also emerged as the ‘experts’ in a particular aspect of service delivery, either formally or informally recognised, and that person then passed key knowledge on to the team:

“I certainly have a preference that the team learns skills as a team, that way the learning outcomes are spread instantly and secondly you get more input so that the learning is more valuable.” – GM.

The corollary was that in some teams specialist skills were required and up-skilling the whole team to maintain diversity was not practical:

“Most of my team has knowledge in most areas; but some don’t have the technical knowledge in all areas but there are enough people in our team who do so it comes down to having the right blend of people to make up the team.” - BA

5.2.6 Facilitating factors of organisational Learning at TrackTech

Scanning Imperative – The TrackTech managers were, in principle, supportive of the scanning imperative, in practice they did not operationalise it to any great extent, other than through the customer feedback mechanism. The managers regarded searching for and acquiring new knowledge about service delivery by scanning beyond the organisational boundaries as a senior managerial concern:

“The front line, the business coaches and advisors, that’s all focused on internal knowledge; it’s not till you get to quite high managerial levels that you go out and do conferences etc.” – EBM.

They also commented that sending staff to conferences and to visit similar agencies was one of the first things to go by the wayside in the economic downturn:

“We used to try and get staff out to conferences and go and work with other organisations but when you have less staff and the same amount of work, it is just not possible.” – EBM.

Intelligence gathering is a key component of the scanning imperative. TrackTech use scanning within their service delivery channel in the form of analysing feedback from users of their web channel as a valuable source of information:

“The best way to find out what people want of our service delivery is the email responses from our websites. Nothing’s more honest than the public telling us what they like or don’t like.” – EBM.

Performance Gap - The managers all confirmed that they are aware of a performance gap. However, they went on to say that operational staff and the senior management team generally did not understand it. They attribute this to the culture of measuring performance using key performance metrics. Meeting those metrics had become a key value in the service delivery team’s rhetoric regardless of the actual quality perceptions that may go with them:

“Instead of asking, ‘what does my customer want? What do they think of us? There is a culture that the [key performance metrics] numbers are what matters, nothing else. They don’t see that there is a gap between the numbers and good service. “I am meeting my [metrics], what is your problem”?” I found myself falling into that trap as well after a couple of years.” – GM.

At the team leader level the performance gap was seen more as a priority setting and budget issue:

“We have built a system that works and functions; it’s not ideal, we could improve it, over time we’ve learned what could be better. It’s just that’s there’s so many other more important things going on.” – TL1.

A strategy used by the managers to address performance gaps is to address operational shortcomings that would not otherwise justify a development projects (refactoring) systems when specific funding is available for legislation related changes:

“...next time there’s a legislation change or something that gives us money to spend we not only do that but pick up on other things that we want to change.” – TL2

Concern for Measurement - The TrackTech managers observed that the measures used to report their activity are too arbitrary and don’t always track consistently with project deliverables. As a result, shifts in expectations and differences in how the systems are understood (the mental models) can impact how systems are perceived:

“When we implement a [online] system we pick figures out of the air to measure their success after they are implemented. A lot of those measures are never met because we are grasping at straws determining measures at the start of a project. Things change, and you don’t end up implementing what you intended but we don’t change the measures.” – TL1.

In order to address that concern a systems thinking strategy was used by the managers at TrackTech:

“Some systems thinking processes are happening now that is turning the focus back to the customer. Traditionally, we set the measures and say we are going to do so much without error by a point in time.” – BA.

The managers also pointed out that the customers themselves are also evolving and have different expectations in different channels so it isn’t straight forward to develop a one-size-fits-all approach to measuring performance in the multiple channels:

“It’s still early days with the Internet for our services and we’ve got a lot of customers who don’t yet see the benefits of doing it online”. - EBM

Experimental Mind-Set - An experimental mind-set is encouraged at TrackTech:

“I think that the department’s attitude to playing with new ideas is very good. We have a chief executive who champions that and demonstrates it in what he does.” – GM.

However, experimentation is seen in the same light as championing ideas and innovations. That is, to experiment with ideas you need your manager's approval and support:

“We try to pass it [experimental mind set] on to our staff. The problem is though, when you are in a production role you don't have time play with new ideas unless they're small ideas involved in the tasks that you do.” – GM.

The managers also see experimentation as being synonymous with change and advocacy. In this way they linked idea generation with a culture of change and adaptation:

“In staff performance agreements I made the team leaders put in an objective for each staff member that they had to come up with five ideas in the next year...There was a lot of resistance to that. Such as ‘what if they can't come up with five ideas?’ I said ‘well you're missing the point. I don't care whether they're implemented or not, what I want is to generate a culture where change is seen as a good thing not something to be scared of.’” – GM.

In service delivery systems terms, experimentation was viewed as essential for a deeper understanding of customer and stakeholder requirements:

“People are quite keen on the idea of experimenting, a lot of what we do is only possible because we are going out a lot more and asking different stakeholders their opinions and acting on them.” – TL1

Climate of openness - Overall, the managers felt that there was an open culture at TrackTech stemming from the way in which CEO supports being open about failures and sharing success stories:

“I think that the culture is very good within the department, I see the chief executive leading that culture.” – GM.

However, there was less confidence about the on-going value of the lessons-learned initiatives. This was not so much from a culture perspective, but came more from a practical consideration, where the operational imperatives of a busy

workplace did not allow time for purposeful reflection on success or failure to get the benefits of deep learning:

“The post-implementation review is fairly recent, but we don’t have a lot of time to sit around and dwell on what might have happened. – TL2.

A key and non-negotiable constraint is the governing legislation that has a very long change cycle – so regardless of any lessons that may be learned there are occasions when nothing practical is going to change:

“Within the business there really isn’t a hell of a lot of room to move because we are a government department. People can come up with a really good idea but we can’t do that because the legislation won’t allow us. To change the legislation takes five, up to, nine years.” – TL1.

Even though the culture is open there is still a natural tendency for TrackTech managers to want to present themselves in the best possible light (Argyris – defensive routines):

“[When service failures occur] we take ownership for an error, a lot of people have trouble doing that. Much finger-pointing initially but, once we have taken ownership for an error, within a team – we’re really good at evaluating why and then trying to fix it and stopping it from happening again. But we don’t want to let other teams know that this happened and that we’re responsible for it. So we will try and shove it under the mat and make sure it doesn’t happen again.” – EBM.

Continuous education - Continuous education was seen as a personal or professional development issue at TrackTech. There was no strong feeling towards valuing continuous education in its wider sense as a means of strengthening the intellectual pool of the organisation as a whole – there was a positive attitude towards training and development that could be related to job function:

“We are certainly encouraged to carry on with our professional development, some is done internally, and some externally....there is

plenty of scope for people to put their hand up for whatever they want to do.” – TL1.

Some managers regarded continuous education in terms of developing individuals and reflected that there is a culture of talent fostering:

“For certain people, they [senior management] are very good at spotting the people with potential, they will up-skill those people a lot, and they have a targeting approach for developing people....It’s not till you get up to quite high managerial levels that you go out and do conferences, etc... so that’s very much driven by the economics of the country, we used to try and get staff out onto conferences and go and work with other organisations but when you have less staff and the same amount of work, it is just not possible.” – EBM.

In this situation, the organisation’s culture within the business units supports a documentation mode that values socialisation of ideas and techniques to share tacit knowledge in order to learn about their roles and responsibilities:

“There’s a culture that people have instilled in them, we expect them to be keen to find out what’s going on. As a team they will find out how something works and they will all get themselves up so that they can answer questions on that topic.” – TL1

Operational Variety - The managers at TrackTech were universally opposed to plurality of methods in service delivery and took a clear absolutist stance. They valued consistency and certainty of method in their operational functions as being essential. They did, however, highly value pluralism in the make-up of their teams so that new methods could be adopted if required but only in a management sanctioned manner:

“I recognise there’s value in diversity and we encourage that. The newest member of the team is proving to be very good because she makes good suggestions and brings fresh air to that team because she is spontaneous and gregarious. Whereas, another who has been there for 30 years and remembers carbon paper is not like that at all but is one of those people

you can go to the bank on [can trust implicitly]. You need people like that and you need people like the first one as well.” – GM

Multiple advocates - Advocacy was alive and well at TrackTech, but hierarchical senior management sponsorship was regarded as the dominant means of getting ideas supported and promoted:

“You can come up with a good idea; unless you’ve got management support you might as well forget it...You are in the public sector the senior managers are the ones with the budget. They’re aware of what the business direction is from the chief executive or even from the Minister.” – TL1.

In this sense, advocacy had to propagate along formal management channels to be taken seriously:

“The original person would get recognition, but there is a process to go through. A lone voice from somebody on the front line who goes to the senior management team wouldn’t get much air time.” – EBM

Involved leadership - Overall, the managers reported that there was a high level of leadership interest in service delivery at TrackTech but a relatively low level of actual interaction or involvement in educational programmes. This was largely left to the supervisors and mid-level managers to do:

“We just got a new division manager of our business unit; the general manager is the next level down, a tier-three manager. People still don’t know who she is even though she is on the floor below us, she’s never walked around. Once a year someone from the senior management team delivers our business plan and goes over it.” – TL1.

The CEO of the department TrackTech belongs to is highly regarded and admired as an effective leader. However when it comes to being involved with the service delivery teams he limits his involvement to short visits only:

“The CEO has been to the contact centre, listened to a couple of phone calls. I’ve never seen him here [production unit] and most of my staff

wouldn't know who he was. I think that they [senior leadership] would like to be involved but I don't think they do it very well." – GM.

The 'general manager' here is given that title in this research for the purpose of obfuscation – the actual job title would identify the organisation and individual:

"Our [general managers] are legally accountable if something happens because of the way that the legislation is. It's their statutory obligation to make a decision so they may be out there trying to figure out what's going on rather than just dealing with the budgets and the high level stuff that the senior managers do." – EBM

Systems perspective - At TrackTech systems thinking is highly regarded as a management instrument. It has been promoted strongly at a leadership level. The managers were generally supportive of this approach and talked of '*using the systems thinking*' to solve problems. They also credited their strong personal relationships as being helpful for them to be able to have holistic conversations about how their units influence other business functions:

"We have good personal relationships and bounce ideas off each other. We will say: 'Look I'm thinking of doing X, I think it's going to have a benefit for you because of Y'. We have those conversations often." – GM.

This meant that the managers at TrackTech were likely to appreciate the systems wide implications of their actions. However, even though there was a collective "buy-in" to systems thinking, operational realities still get in the way, managers acknowledged that they still have to address issues and move on without addressing root causes:

"When you've got work that needs to go out within three days, you just want to get it done. We try to understand all that systemic stuff [the systems thinking professional development programme]; how it's happening and why it's come about," – TL2.

They did coming back to the theme of the governing legislation as a not-negotiable constraint to their ability to think about issues in a systemic way. Even

if they could see a collaborative and efficient way of achieving something they always had to make sure it met their compliance requirements first:

“If you are working in another group where they are not working to legislation they have more freedom, our business is constrained [by the legislation].” – TLI.

The governing legislation was also viewed by some as a support mechanism. If the legislated performance metrics are unable to be met then support for addressing issues is forthcoming from the leadership:

“The beauty of our business is we are driven by performance measures to the Minister. So if any issues crop up which affect meeting the performance measures that puts a lot of pressure on us to fix it quickly.” – EBM.

Challenging team practices is seen as a normal activity for the TrackTech managers. Each business unit has its own advisors whose role includes a responsibility to “*think outside the square*”. In addition organisational learning that would in theory occur within the group of managers has actually been devolved to a separate business unit so that the managers do not have to worry about strategy and instead focus their attention on operational delivery:

“...also, we have a whole business development unit to do that “crystal ball gazing” – to challenge the assumptions of why we do things, it has been taken out of the business unit’s hands, a lot of what I call ‘strategic stuff’ is given to people who have the time to dedicate themselves to it.” – GM

5.2.7 Case 1 Summary

The preceding discussion has summarised the findings of the TrackTech case. Overall, it has illustrated a cross section of organisational learning attitudes and beliefs amongst a group of professional service managers in the New Zealand public service central government context. The next case, TechSci examines a similar group of managers in a different organisational setting.

5.3 Case 2 - TechSci

TechSci is a central government agency that has a mandated responsibility to acquire, process, and store key technical data for reuse by scientific, legal and engineering professionals.

It acts as steward of statutory scientific data about New Zealand. From this data TechSci also produces technical intellectual property artifacts that can be purchased by customers for end-use. Alternatively, data is also supplied on a wholesale basis for aggregation into added value consumer and professional products.

TechSci sees its service delivery function in terms of two broad kinds of product offerings: transactional products - where changes, additions and deletions are made to established databases, and information products - that involve TechSci developing technical information artifacts derived from basic data for use by civil agencies, military and general consumers.

Of the organisations approximately one million statutory data records requiring create, update or delete and legal review transactions per year, around eighty percent of those are conducted in the online channel. Other technical information products are made available in a wide variety of paper and electronic forms that require TechSci to have a well-organised pre and post sales customer service function.

At the time of this research, a large part of TechSci's service delivery systems development was focused towards process aggregation and striving for efficiency gains consistent with the prevailing dominant discourse in government (as at 2009) of "better, faster, cheaper". Efficiency goals form a large part of the prevailing service reform rhetoric.

5.3.1 *TechSci's customers*

TechSci predominantly deals with three customer groups; the first being transactional customers who are typically legal, scientific, or engineering professional practitioners. The professional practitioner typically has a

downstream client who is required to pay for the indirect access to TechSci's data via valued added services.

The second customer group is the general-public customer (mentioned previously) who purchases the information product directly or from a third party sales agent in a more traditional product-service exchange encounter. These customers often have little or no buying power or consumer choice as they have to obtain the information product from TechSci in order to fulfill a transaction with another branch of government.

The third customer group includes other public sector stakeholders such as governing minister(s), other government agencies, and stakeholders who require an authoritative (in the legal sense) source of government datum. In this regard, TechSci regards the government itself as a customer, one with needs that do not link directly to a service-agent style customer interaction but something that is seen as more of a partnership responsibility.

5.3.2 *Manager Roles at TechSci*

Customer Service Manager (CSM) - This manager has been running the contact center for eighteen months and still regards herself as a newcomer to the organisation. She has a background in call center operations management in several private sector businesses and brings to TechSci what she describes as a “business-first” approach to the marketing and customer operations at TechSci; something that does not always sit well with some of her colleagues who have been with TechSci and its antecedent government departments for a long time.

Transaction Processing Manager (TPM) - Has been in charge of the transaction processing team for six years and is accountable for the transaction processing data quality and integrity management. He has oversight of several nationally distributed teams and is the business owner of the centrally located IT systems. His team processes approximately one million customer transactions per year. The team has recently been through a rationalisation process that has reduced face-to-face operations and increased use of automation and online processing.

Online Services Manager (OSM) - Runs the online services part of the online database. He has held this role for the last five years and came to it from an agri-business marketing role. He sees his role as being proactive in engaging with stakeholders and translating business and customer needs and issues arising with the online product into requirements statements that can be used to initiate IT changes.

Database Owner (DO) – Is the manager who “owns” most of the large statutory data sets. He manages a team of technical specialists who have both front and back office responsibilities. He has been in his current role for two years but has more than twenty years accumulated service with TechSci. His team of thirty technical specialists are involved in standards setting, policy advice to government and data stewardship issues concerning several statutory data sets.

Specialist Project Manager (SPM). A project manager whose focus is on developing new information products defined by analysing customer demand, observing changes to technology, and participating in global standard setting processes. This manager looks after existing business resources and external contractors to initiate and implement new IT development initiatives.

Technical Specialist Manager (TSM). This was the manager and steward of several of the large long-term data sets for which TechSci had statutory responsibility. He also oversaw the delivery of access, changes and revisions of the critical non-transactional data sets. He was a long serving (30 plus years) professional practitioner. He had been in his current role for six years.

The six participants described above form a representative cross section of the service management functions at TechSci as identified by the CEO and senior management team of TechSci. They function as operational supervisors of the service agents and are actively engaged in defining and analysing present and future service delivery systems initiatives.

5.3.3 *Systems experience at TechSci*

TechSci saw itself as an information provision specialist organisation. To this end they had a great deal of internal skills and expertise in their particular area of specialty. However, until the last five years or so they did not have expertise in translating that internal pool of knowledge into commercialised outputs as that was not seen as a part of their organisational responsibility. In recent years with a tendency towards information products being ‘packaged’ they have had to innovate and come up with new products and new means of delivering services.

5.3.4 *Service Delivery Systems*

The service delivery systems at TechSci have also undergone a transformation in line with the organisations new approach to delivering products and services. Technical services and products have been moved from traditional postal and over-the-counter services and print media to online and electronically delivered products. The service delivery systems have grown up around the need to meet these changes.

5.3.5 *Organisational Learning orientations at TechSci*

Knowledge sources - The inclination of the TechSci managers was primarily geared towards valuing internal knowledge sources. TechSci is a technical specialist organisation; they are the only service of their type in the country and hold unique statutory and scientific data on behalf of the community:

“We value information from outside but in the particular disciplines that we cover there are very few professionals in New Zealand that didn’t actually get trained by the Government.” – DO.

The service delivery teams are also established holders of technical expertise in their area. For this reason as well, there is a strong bias towards trusting their internal knowledge:

“We rely on our internal processes; we are a technically specialised group and tend to pour cold water on bringing external people in to tell us how

to run our business: “why should we have someone coming to tell us how do it?”.” – TSM.

Some of the managers recognise the need to also reflect the external perspective, especially for those that are long-term professionals in their area. They were concerned that they need to be seen to seek advice even when they are often the people that advice is sought from:

“When you have been here a long time and you have a bit of history people tend to say: ‘you’ve been here too long and you have too many fixed ideas,’ so I go outside to get that broader perspective.” – SPM

Product or process focus – The managers at TechSci value a product orientation when it comes to service systems definition and configuration. They report that their service systems definition process took an outcome-centric approach:

“We have a dedicated group of people we go to great lengths to make sure that we do not have scope creep beyond the product we were trying to achieve.” - TSM.

Even though the managers talk in terms of taking a product focus for defining their service products and systems, they also acknowledge that in an operational sense the organisation tends to be process centric when it comes to understanding service failure:

“I am focused on outcomes; there are a lot of people who are more focused on how it all got there but if you take a litmus test in the organisation it is pretty process focused, hence the need for the customer strategy.” – CSM.

Documentation mode – For the managers, public knowledge acquisition and transfer is a supported value at TechSci. They endorse working in collaborative teams and the use of consultative approaches to gain new knowledge across disciplinary lines and from customer interest groups:

“We have joint working groups, not just within our group but across different disciplines within the organisation to determine the optimal way to deliver the service.” – OSM.

The managers explained this in terms of building skills in two areas: those that were of a general technical competency typically distributed across the entire team and other skills related to specialised products that were addressed by developing knowledge of key individuals:

“We have to have people skilled in different areas so we tend to be more individually focused. I try and look for opportunities and try to pick the people I think will benefit rather than just because we need knowledge in this area. It comes down to working in a very specialist field; we can’t have everybody with the same level of knowledge.” – DO.

A concern was raised by a two managers, however, that there was a tendency to value personal knowledge acquisition at the expense of up-skilling whole teams. The consequence of that was that knowledge would then be lost to the organisation when the person with the knowledge moved on or changed role:

“Too often it would happen that an individual was trained up, didn’t pass on the knowledge, and then moved on.” – SPM

Dissemination mode - TechSci has a culture that values wide and formal consultation with stakeholders and sharing of service related knowledge across the disciplines involved. The consultation groups are organised in the manner of communities of practice:

“We have regular stakeholder meetings with every man and his dog attending and they talk about the service delivery levels. – CSM.

Some managers also rely on informal mechanisms and personal networks to communicate service values:

“...I also do a lot of research every month, but if the research is showing that some communities are not happy, that is when the informal networks kick in, and then I use all the informal channels to get action.” – OSM

Learning focus – Three of the managers used the example of developing their flagship online database service. The learning focus used at TechSci during that development was biased towards an incremental learning focus, even when they were undertaking a service delivery systems project that was regarded as

transformative they preferred to build their skills as an organisation in an incremental manner:

“...we actually built the knowledge and skills as went along - it would be great to turn the clock back and say “goodness if we had another go, avoiding those mistakes, it would be so much simpler.” – OSM.

They also described the use of critical success factors as a goal setting mechanism to operationalise the service vision and to develop suitable tactical approach. They acknowledged that although their approach to development and learning was still largely emerging they still had a lot of rigor around the process of learning what worked. This was achieved by exploiting external systems development consultant expertise:

“In hindsight if we had tried this under our own steam, we would have failed. We had to have that expertise from outside to get us on that journey. We are less reliant on external parties now.” – OSM.

Additionally, the managers stressed the importance of having senior management support, and the backing of the industry:

“For a transformative initiative [senior management support] was able to bubble up in an incredibly conservative culture. We had to have a base community that was really strong on it for that to happen.” – OSM

Value-chain focus – Because the government defines TechSci’s mission, the managers do not get many opportunities to define its products from the outset. Instead, they seek to provide an engineered solution to the information delivery responsibility it already has:

“Intuitively, it is an engineering approach because there is a pretty focused outcome, things have changed in the world and we are able to do things better so we initiate change on behalf of the Crown” – SPM.

However, for the managers of some areas this approach was being eroded to the extent that within the organisation’s mission the managers had recently begun to get leadership support to look for ways of adding new value to their service products:

“Traditionally, we use an engineered approach, we have big data sets, and we just put them out there. Our new chief executive has a mandate to get us out of that very narrow focus, There is a culture shift beginning where we are we can engage with [other managers] to add value” – DO.

Skill development focus – For the managers at TechSci, Team Learning was identified as a priority at the leadership and senior management level:

“There is a desire to push the team aspect over the individual aspect; I think that’s a reflection of the personalities that you get in senior roles.” – TPM.

The teams at TechSci are functionally based and according to the managers’ personal mastery is a core value in their team culture:

“We have teams with clear roles; each person does specific professional training where their gaps are to get them to a certain level.” - TPM.

It was also acknowledged that this focus has been an issue in the past where managing teams of specialists brings with it particular skills development challenges:

“We currently have a structure that creates a career path for those that want to grow into the expert roles...we’ve have had headless teams, we’ve had people responsible for 70 self-empowered individuals, that’s not a joke!” – OSM.

The managers also stressed that the individual skill development was important to the development of their teams due to the specialised nature of TechSci’s information products:

“We have gurus in some areas, then when we have to replace them we hire some high flyer straight from uni’ that’s got all the credentials.” – TSM.

Some managers felt that focusing on the individual was still the best way to build team capability:

“I value individual learning over team learning; give them the opportunity to develop. We did a staff satisfaction survey that said people in this group felt were more satisfied with what they were doing than other teams, so I will continue to do it until someone tells me not to.” – TSM

5.3.6 Facilitating factors of organisational learning at TechSci

Scanning imperative – The TechSci managers took a pragmatic approach to acquiring new knowledge by looking for useful exemplars. They regarded scanning beyond their own knowledge base as desirable, even though they highly valued their own skill-base:

“It comes down to “show us something that’s an actually working model rather than something that’s theoretical” – TPM.

In addition, the specialist delivery groups who utilise the customer service delivery desk expressed some frustration about who gets to ‘own’ the customer or stakeholder relationship:

In the project I was interacting with the stakeholders but we had to have someone from the customers’ group in every meeting. I think it’s crazy.” – SPM.

TechSci managers actively scanned for service knowledge through participation in multi-agency forums, industry workshops and professional conferences to learn about alternative delivery options and to critique of their own practices:

We are active in the marketing association and the SSC [State Services Commission] forums, we go to breakfasts and lunches, conferences and things like that to try and hear about models and case studies etc.” – DO.

In addition, due to TechSci’s unique status as a one-off in the country it also needs to scan beyond the national context and looks mainly to its Australian state counterparts to provide and seek exemplars of what service models work and which ones do not – that is, they scan, but not just for purposes of emulating:

“Each [Australian] state operates very differently, some provide a lot of services to the public, some are a bit like us – “here’s some data, that is

the end of it” - there might be a little bit of a rub-off but beyond that. I think we are inwardly focused on what we are doing.” - TSM

Performance Gap - Overall, TechSci’s managers were consistently aware of the performance gap but did not necessarily view it in the same way. Some regarded it as an item of concern and something that warranted intervention and others simply accepted it as part of the service delivery landscape in which they operate:

“You’re never happy with what you can deliver in the timeframe that you have available, we’ve actually had some interesting feedback from some of our customers that we’re too quick – those that stand to gain from our delays.” – TPM.

For others, customer satisfaction was consistently a top-of-mind reaction when it came to discussing the performance gap:

“...our customer satisfaction research last year came back way higher than we thought; close to 85% of our customers are very satisfied with our service.” – DO.

Other managers pointed out that they were constrained in how much service innovation they could undertake by their brief from government about the services they deliver:

“There is a performance gap but it is an intentional one rather than a perceived one. Our mandate up until this point has been you will go this far and no further, it is directed what we will deliver”. - TSM

Concern for measurement – There was a clear concern for measurement among the managers that centered on key performance indicators and service level agreements. The feeling was that they were trying to balance finite and often diminishing resources in order to deliver services:

“We don’t go to the customer and say “what would you like?” Because they would say they want it in five minutes. And then we’d say “if you want it in five minutes we have to resource up, which is sub-optimal with too much down-time getting down to five minutes”. So we have a queue -

we resource at the mid-point and there are peaks and troughs in the service delivery.” – TPM.

The technical specialist group managers were outcome focused and delivered on service related activities that lead to customer value via their transactional products:

“We have desired outcomes that we report on. We do a monthly satisfaction survey and report to Cabinet on that as well as the service levels including things like online availability” – DO.

Two of the managers did not share the same level of concern for measurement however one said:

“Not really a great concern for measurement in my area. We do not have mystery shoppers or anything, we might wait two years before they do a customer satisfaction survey.” – TSM.

While the other felt their team was the only one that cared about measurement:

“We are concerned about measurement but the teams we serve can be very resentful, we have got quite a few girls in our team and the organisation is full of boys and they just think that we are the girls on the 7th floor – complaining, whinging girls” - CSM.

Experimental mind-set – When it comes to playing with new ideas, TechSci managers endorsed experimentation but bracketed the conversation within a risk-management caveat. That is, they are open to ideas and trials but also try to minimise the possible risks to TechSci’s operations and reputation. As part of that the culture requires senior management sponsorship must be obtained for all but the most trivial experiments:

“On a scale of 1-10, I think we’d be 7 ½ for willingness to experiment. There are decision makers in the organisation that are quite open to new ideas and new ways of doing things. – TPM.

The risk-based approach focuses on taking a pragmatic approach to experimenting and innovating:

“Right, what’s the worst that can happen?” “Is anyone going to die?” For us, the answer is no, then you work back and say: “right, okay someone could be out by \$10,000. How often is that likely to happen?” “Once in five years?” Let’s design this around the norm. We’re not about designing new systems around the exceptions.” – TPM.

However, it has been a difficult mind-set change for a number of long-term employees that have grown up with a risk-aversion or minimisation culture. TechSci’s present management culture has a willingness to focus on the customer’s intent more than absolute compliance with process:

“Don’t worry that some minor clerical details are missing; we ask ourselves, does it matter that there is some minor mistakes? We’ve got them thinking about the intent of the parties.” - OSM.

There was a general willingness at TechSci to undertake small scale pilots of ideas with a view to rolling them out on a larger scale or for other applications if they are successful:

“We’ve just done a pilot using Wiki forums for enhancements to the online system - that was really successful, so we are going to roll that out for other internal projects and external groups.” – DO

Climate of openness – Overall, the managers reasoned that the culture at TechSci is predominantly open to new ideas and thinking. They felt the CEO had worked hard to reverse the defensive routines of the past and build a “lessons learned” culture:

The CEO has regular forums where he invites different levels of the organisation to come along and tell him what’s wrong and what’s right, and give him ideas. He responds to them all too which is good” – OSM

However, those defensive routines by managers did not necessarily give way easily. The managers acknowledge that they are still prone to being cautious in keeping with the New Zealand public service culture of risk aversion:

“If there are problems, we are reasonably open but sometimes it gets down to individuals – some think it better to suppress and pretend it did

not happen. If you had a project at the time when a lot of “think big” government projects were going wrong. You had the INCIS project⁶ which was not successful and other big IT projects falling over. Here comes along another department with a \$140m project. The chief executive at the time did a tremendous job but failure was not in his vocabulary - he was very staunch. That built a culture of – not quite of fear but a “no matter what – get the job done” attitude. If things were not going quite right, you would make it happen, rather than being open about it. We have moved away from that now.” – TSM.

The managers commented that the ‘staunch’ culture created a pattern of maintaining the appearance of everything going smoothly even if service performance was not in practice:

“We had a culture of “keep it under the radar” because it might be detrimental; quietly fix it up. We are starting to get to a more open organisation now.” – OSM.

In addition, TechSci explored more formal approaches to incident management and used the analysis to challenge the defensive routines; they acknowledged that it is still early days for them:

“We’ve now got an Incident Manager, a good one, so we are definitely more open now to having debates and making sure that we are happy with the proposed way to go forward because it is critical.” – DO.

Continuous education – The managers supported and valued the notion of continuous education and operationalise it in the form of professional development:

“We have individual experts everywhere. There are pockets of excellence; you can understand it because it is such a technical area. People here have PhDs in these things, very bright, mathematical, algorithmic, type

⁶ An IBM™/Government joint venture to provide integrated systems for the NZ Police that collapsed very publicly in 1996

people. So, those people are terrible leaders, they are great in their field, but put them in charge of a team and you'll have HR issues.” – TPM.

However, they displayed little interest in service staff having interests wider than the professional competencies as being necessary for their service roles:

“What tends to happen is that [the focus of education] is more of the same [role specific professional development] around what they are good at. ” – CSM

Operational variety – As a general concept, pluralism was unpalatable for the TechSci managers, they regarded consistency of service as a core value for them and while they do support innovation and experimentation it has to happen within the bounds of formal process in their view:

“The whole idea of an automated system is to have a consistency in processes. The more variance you have, the more variations to the processes, the more difficult it is. We’ve gone the other way and said: “let’s agree best practice, have the argument about which is best open the dialogue and once we agree that’s how to do something we’ll lock that down and say: right, that’s our best practice and everyone should be doing it that way” – TPM.

They felt that while diversity of skills in their service teams itself was valuable, the service artifact needed to be delivered in a very consistent manner:

“We are delivering some products which have safety-of-life issues, so we have to have very rigid processes that really have to be adhered to.” – TSM.

Multiple advocates – Advocacy and championing of ideas is valued highly at TechSci but it is viewed as a leadership responsibility and follows hierarchical lines:

They [senior leadership] have gone out and talked to everyone and said “help us build the picture”. Which is a very powerful message to other managers saying; “we’ve got some initiatives we want to get off the ground.” – TPM.

They identified that ideas need to be linked to government initiatives and it was relatively senior managers who had access to the knowledge of government plans and processes:

“There are not very many ideas that the receptionist, could come up with that would get taken anywhere. Everything’s got to be linked to a policy document or a standard that reports back to Cabinet or similar.” – DO.

They did, however, acknowledge that there is potentially other ways of looking at advocacy and ideas sourcing that may result in ideas being generated and supported from non-hierarchical parts of the organisation:

“The new general manager comes from the health sector... suggests we should be out there working with partners and delivering different products and interfacing” quite a fresh approach – quite different. I think we are quite open to that.” – TSM.

The feeling was, however, that even with ideas entering the organisation this way they would still require management support to gain traction.

Involved leadership – The managers felt the leadership was genuinely engaged in how customers perceive the service they deliver:

[The CEO] ran some sessions about where we want to see the organisation go; that was on vision and how we are going. It was getting everybody involved in who we are and the international global scale where we want to be and all that, setting strategy.” – DO.

They also identified that the leadership does not become actively involved in education programmes to understand the service models in detail and that is seen by the leadership as a shortcoming that was being addressed:

“The leadership has to be diverse in the areas that they cover, anything from the transactional services, administering crown properties to tender agreements, contracts etcetera. - TSM

Systems perspective – Overall, the managers did not feel TechSci was focused on taking a holistic systems perspective and felt that they were focused on

departmental issues but were aware of the need to address the siloes that existed between the multiple business functions at TechSci:

“I don’t think systems problems seem in terms of their relationships in other departments they are more just taken in a reactive approach; “here’s a problem, we need to fix it”- TSM.

This was an area where they had identified weakness in their collective capability and something that they had traditionally purchased externally when they were embarking on large scale change rather than something they did on a regular basis:

“We don’t have a lot of grunt [organisational capacity] internally to manage that [systems thinking], and expertise in systems architecture. When we build that capability internally they go off to pastures new and green”, and take all that knowledge with them.” – TPM.

They acknowledged having a specificity issue where they were under pressure to outsource and while trying not to become overly dependent on vendor relationships with excessive exit or switching costs:

“It’s a complex system that we’re running here and people that may come from different backgrounds have to actually get up to speed quite quickly, then if something turns pear shaped then we need to rely on expertise from outside to fix it.” – OSM.

Some managers also expressed concerns that for systems reviews arising from service failure the symptoms are addressed but there is a lack of whole systems thinking:

“I’m not sure how much processes really change. It’s done in small pieces - not holistic enough.” – OSM

5.3.7 Case 2 Summary

In this second case, it was seen that there was a lot of commonality in the level of commitment to organisational learning, the strong public service ethic, and a shared service commitment. There was some critique of the level of management

support that was available, but overall, these managers like those in case one, were building a strong organisational learning culture.

5.4 Summary of Dyad 1

This concludes the presentation of the findings of Dyad 1. In this Dyad it has been illustrated that the two central government agencies have a strong public service ethic and commitment to their functions that transcends accountability to any particular stakeholder. Concepts of information stewardship are beginning to emerge. They also have an interesting approach to co-production of service value in collaboration with customers that reflects the complexity in the public sector definition of what is a customer.

In the next section of this chapter the two cases are analysed together.

5.5 Dyad -1 Cross case comparison of TrackTech and TechSci

The following comparison uses the analytical lens again, this time it is used to consider how the organisational learning elements identified in the chapter so far are similar or different across the two central government agencies.

5.5.1 *Learning Orientations*

Knowledge sources focus - Both organisations are specialists in their area and perform unique public information management functions in New Zealand. The managers rely predominantly on internal knowledge sources rather than external sources for their learning about what is good service delivery in their service delivery contexts. They also shared an interest in looking to peers in overseas organisations for acquiring comparative knowledge about their service configuration. TrackTech looks externally to its Australian equivalent branches of the state governments while TechSci uses international professional forums such as conferences to share their knowledge about service alternatives and practice.

Product/process focus - The managers at TrackTech and TechSci shared a tendency to favor product over process in their approach to service systems definition. They also shared a strong sense of obligation to deliver services on behalf of the Crown as defined by legislation, as a result, their primary focus was on meeting the outcomes necessarily to fulfill those obligations first and establishing processes that support those outcomes second.

Documentation mode - For both organisations a shared preference for a public documentation mode was shown rather than valuing personal documentation alternatives. Explicit knowledge and documented procedures are valued highly by both groups of managers in order to maintain consistent and predictable learning about service practices.

Dissemination mode - Both organisations clearly favored formal channels for the dissemination of service practice knowledge and favored using directed learning for the dissemination of ideas and valued the need to align learning with project and organisational objectives. TrackTech had a strong project culture that valued formal methods of communication. While TechSci favored formal departmental

management lines of communication as their preferred means of disseminating learning about service practice. Informal channels were acknowledged by both groups of managers as useful and necessary but both regarded them as a means of reinforcing the formal mechanisms not replacing them.

Learning focus - For this learning orientation, the managers in both organisations shared a preference for an incremental learning focus rather than a transformative approach to learning about service delivery practice. The managers at both organisations understood to some extent the language and process of double loop learning but indicated that their organisations had risk-averse cultures that preferred learning and change to occur in small, incremental steps rather than large transformative ones.

Value-chain focus - For both groups of the managers the preferred interpretation of their value chain was one of a pre-defined “design and make” approach or the engineered approach. The main point of reference for defining the service obligation for these managers is a governing act of parliament. The form and structure of their services is defined in those statutes (the engineering) and their role is to implement and operationalise it (the make). There is almost no scope for these managers to market their services to create a demand and then deliver to that demand as can happen in a commercial setting.

Skill-development focus - In this orientation the two groups of managers had diverging approaches. At TrackTech the managers favored building skills in their service teams at the level of the team. Whereas, at TechSci where there was a reliance on technical specialists to define and configure the information products they manage the managers viewed the individual talents of those specialists as being the primary focus of skill development. However, the contact center manager at TechSci differed from her colleagues. Her team was made up of more generically skilled people so she preferred to take a team-learning approach very similar to that of the TrackTech managers.

5.5.2 Facilitating Factors

Scanning imperative - Both organisations were clearly supportive of scanning their professional environment for new knowledge about service delivery

practice. They differed in motivation somewhat in that TrackTech felt that scanning was valuable but viewed it a responsibility of strategy and higher levels of management than their operational level – as noted earlier TrackTech had a business unit dedicated to strategy so the operational managers did not feel it was within their brief. Whereas, at TechSci the managers regarded scanning their environment as more of a reason to engage with their professional counterparts in other jurisdictions, the independent professional practitioner's and academic communities as a means of capability building and for identifying opportunities to enhance the information product portfolio they were responsible for.

Performance Gap - Both groups of managers were aware of the performance gaps in their organisations service delivery. However they differed in how they chose to view those gaps. TrackTech felt the service performance gap was something that was appreciated by the operational managers only and needed addressing as a matter of continuous improvement. In contrast, the managers at TechSci felt that the service performance gap in their service delivery was a more related to a matter of establishing the correct degree of satisfactory performance to meet stakeholder expectations (an example of a service management satisficing⁷ strategy).

Concern for measurement - The managers in both cases had a clear concern for measurement of the service performance gap but expressed their concerns differently in keeping with the understanding of the gap described above. The TrackTech managers were more concerned about how the measures were defined and the processes that led to gaining the measures. While on the other hand, at TechSci the managers expressed their concerns in terms of customer expectations.

Experimental mind-set - The idea of an experimental mindset was endorsed by both groups of managers. However, both groups shared a similar caveat that for them experimentation was acceptable only in the form that the ideas involved needed to be sanctioned and endorsed by management and any attendant risks assessed and managed carefully.

⁷ A satisficing strategy is a portmanteau of satisfy and sufficient that describes a decision strategy where an optimal decision is rejected in favour of one that is adequate to the task.

Climate of openness - Following on from the experimentation factor, the managers in both organisations felt their respective organisations operated within a climate of openness. They also shared the idea that the need for political and public accountability that created a culture of risk aversion so while openness about service failures and lessons learned was encouraged, maintaining the reputation and service brand performance was also important to both organisations.

Continuous education - Of all the facilitating factors of organisational learning this was probably the factor that was least interesting for the managers at both organisations. The managers did not have any particularly deep concern for continuous education as a factor in their service delivery management thinking. For learning associated with service delivery systems definition and operation the managers at TrackTech did not feel it was any of their concern. Whereas, the managers at TechSci operationalised it and valued it to some extent as a variation of professional development that was an important aspect of their professional culture as they have many professionally accredited and highly academically qualified service delivery staff.

Operational variety - The managers at both organisations were consistent in that they found operational variety highly unpalatable for the operations and configuration of their multi-channel service delivery teams. In both settings, their approach to service standards setting was to establish clear performance standards, aim for service continuity across channels and pursue compliance with those standards as a management performance expectation. To both groups, having multiple methods of executing service delivery tasks was inefficient and counter-intuitive to their service quality management expectations.

Multiple advocates - Both groups of managers regarded their respective organisation as supportive of new ideas and thinking regardless of where those ideas originated in the organisation. However, they also shared a view that support and championing of those ideas was a hierarchical process and that advocacy, while being seen in both organisations as being important, required management sponsorship that followed the organisation's management processes to be acknowledged and funded.

Involved leadership - TrackTech's leadership was viewed by its managers as disinterested (but not uninterested). They felt that the leadership cared about being involved from an expectations and strategic perspective, but was not seen by the managers as being, or necessarily needing to be, actively engaged in service delivery systems or their definition. In contrast, TechSci's leadership was prepared and interested in engaging actively with the service planning and definition process and was seen as being dissatisfied with their involvement to date and was planned to increase their involvement in the definition and understanding of online and multi-channel service options.

Systems perspective - For the managers at TrackTech, systems' thinking was a formally endorsed programme that was championed by the CEO (despite the stance taken in involved leadership above) and used as a problem solving framework to critically examine the service relationship between departments and the public. In contrast, TechSci managers felt their organisation was very siloed and focused on departments who delivered their service independently, even though they operated through a shared multi-channel interface and that performance and systems problems were addressed in a reactive manner.

5.6 Chapter five summary

In this chapter, the findings of the two central government agencies have been presented initially and then followed by a cross-case analysis of this setting. It has illustrated the way that this group of managers went about using knowledge management strategies to facilitate their organisational learning via use of knowledge sources shared documentation strategies and an awareness of their value propositions and illustrated their building and using of an organisational learning culture shaped by a strong commitment to public value. In the next chapter, the focus shifts onto the two territorial authorities in order to learn about how they use their organisational learning.

Chapter 6 Dyad 2 – Biggerville and Smallerville

This chapter follows the same three part format as chapter five. The case numbers follow on from the preceding chapter so the first case in this chapter is case three anonymised as Biggerville (BCC) and is followed by case four known as Smallerville (SCC).

6.1 Introduction

Both organisations are territorial authorities (City Councils) operating under the primary aegis of the local government act⁸. In addition, local governments have wide ranging responsibility for other laws such as the building act, dog control, parking, water quality and many others that influence how the managers view their roles and responsibilities.

6.1.1 The local government context

The primary mandate under which the city councils operate is the Local Government Act 2002. This act of parliament provides the operating framework, scope of responsibilities, powers, obligations and responsibilities to local governments. The Act sets out obligations for councils to meet in terms of reporting, assessments, and accountabilities.

The moderating effect of this Act is a practical example of the necessity of separation of control (The terms of the Act) from operations (the council's service agents) to address the information asymmetry problem between public sector customers and agencies as discussed in chapter four.

6.1.2 Economic downturn

This research was also taking place against the backdrop of the global financial crisis and the employees of the local government agencies were not immune to the prevailing uncertainty. In addition, these conversations took place just after a new government had been elected and the incoming minister of local government

⁸ Available at www.legislation.govt.nz – this is one part of the complex network of parliamentary acts that PSO's operate under. For example, City councils also must operate under the local gov't meetings act, the privacy act, the building act and so on.

who had campaigned for reduction of local government and major reform. Many of the managers in the case organisations below were openly fearful of their continuing employment.

This chapter examines the local government case dyad. In this setting the case studies are drawn from two city councils of similar size and scope. Case three serves a constituency of almost 200,000 citizens and case four serves nearly 100,000 citizens.

The organisational configuration of both organisations is similar. That is, each has a politically appointed governance structure made up of: a mayor and city councillors, an appointed employee as chief executive, and a city council corporate structure. The city councils deliver some services directly and others via council controlled organisations (CCO's) that are autonomous company or trust structures accountable to the council but not managed by them. The cases in this study are concerned with services delivered by the council corporate entity and not the CCO's.

6.2 Case 3 – Biggerville

The following sections analyse the discussions with the managers from BCC using the research lens and follows the same organisational layout as chapter five.

6.2.1 Manager Roles at Biggerville

The following managers from Biggerville were interviewed for the Biggerville case:

Unit Manager (UM) – This tier three manager role manages the business unit that has multiple service delivery teams focused on delivering community services such as citizen centres, youth programmes, cultural relations, and grants funding.

Business Manager (BM) – This role reports to the unit manager, he is responsible for the day-to-day operations of business unit, maintaining initiatives such as the online services and monitoring service quality.

Communications Manager (CM) – Works across the service delivery sections to help facilitate effective multichannel communications and planning by defining the unit's online presence via Wiki, web, email groups and other initiatives.

Team Leader 1 (TL1) – leads a team of service agents delivering face to face and online services to community groups such as older citizens, community centres and youth groups.

Team Leader 2 (TL2) – leads a team that delivers online services and over the counter services to architects and construction industry participants for building act compliance. This participant is different in that she does not report to the unit manager above but instead reports to a different tier three manager.

6.2.2 Systems experience at Biggerville

BCC has multi-channel service delivery systems that span multiple service functions from community housing to online petitions and citizen engagement. BCC has developed a substantial internal capability for analysing and developing systems that suit these needs.

6.2.3 Service Delivery Systems

BCC has a service culture that uses multiple delivery channels and systems for delivering its services. Service agents have to be able to use strategies which direct users to the most appropriate channel for their needs and the systems integration behind the scenes needs to be up to the task. This reflects the challenging and diverse nature of their customer base. They span from the highly technology literate to new migrants with little or no local language skills.

6.2.4 The nature of Biggerville's customers

BCC serves a diverse city with customers spanning the full spectrum of the citizens in their city. This means citizens have to maintain a variety of capability within their service delivery channels. For example, it is impractical for the front desk to direct a homeless person to submit a request for housing via a website.

6.2.5 Organisational Learning orientations at Biggerville

Knowledge Sources – The managers at BCC described their experiences of learning about service delivery knowledge through using a variety of sources. Overall, they indicated that the organisation mainly favored internal knowledge sources as the primary focus and reinforced its actions by seeking external sources for verification. Some described the knowledge sources valued at BCC as being dependant on whether the knowledge being sought is specific to the city or something else:

“When we’re focusing on [BCC] we perceive ourselves to be the experts [about the city], we cover everything from sewage to community engagement and we have the knowledge to back that up. Beyond the city when we compare ourselves to other urban centres and internationally, then we have a lot respect for external knowledge.” – BM.

Other managers cited examples where BCC had its own specialists who engaged with external agencies to build new service contextual knowledge:

“I’ve worked with the [internal] planning, performance and research teams. They are pretty on to it; they liaise with [external agencies] like Statistics New Zealand for the quality of life survey.” – BM.

However, not all the managers agreed, some managers voiced the concern that BCC does not include similar organisations in New Zealand or elsewhere to learn about best practice:

“There’s a top-down unconsulted response around systems knowledge. I don’t have a sense we’re learning from other councils, the system doesn’t value internal research and knowledge enough...” – TL1.

Another described internal knowledge as being underutilised and suffering from “not invented here” syndrome:

“There is a culture of valuing external providers’ knowledge, like a seal of approval if it’s been done outside - which is not necessarily the case” – UM.

Product or Process Focus - In discussing the accumulation of new knowledge about end results there was a strong emphasis on the “what” or product focused end of the continuum. Some managers felt there was too much emphasis on measuring the organisation’s service performance by what has occurred historically and insufficient attention to targeting services to areas where they will do the most good:

“We pay lip service to targeting but it’s not something that we look at enough. Our work is dominated by the need to report on funding and predetermined quantified outcomes.” – CM.

Some of the other managers descriptions pointed towards this thinking as being a more widespread cultural value exhibited by the leadership:

“My experience from the leaders forums is that when knowledge is presented to back up a particular presentation as to what we could do better, it’s taken from the end point: “this has happened, this is where we’re at now, what can we do about it?” - BM

Documentation Mode – The managers’ conversations about the documentation mode favored the valuing of personal (tacit) knowledge:

“There are gurus that the organisation picks off and uses in the individual sense. It’s the [management] confidence thing, if someone demonstrates a high level of ability. The [leadership] trust factor saying: “ok they’ll deliver it and they’ll do it”. – UM.

Several of the managers viewed it as a form of encouragement and mentoring where the focus was focused toward the nurturing of the individual who had gained the confidence of senior management:

“After a period of time, at least a year, you gain a reputation for being useful. That gets you involved in cross directorate meetings and you build up personal knowledge which sets you up to be a target for opportunities. You’re seen and invited to meetings or you’re not. Personal style is respected and you’re involved.” – BM.

Some of the managers saw this as a systems thinking shortcoming and they felt that the organisation had become overly dependent on a few skilled individuals:

“There’s not a lot of emphasis on team, somebody gets a name for knowing about certain things, when that individual leaves the thing falls over. The system problem is how to contain and record that knowledge, it doesn’t happen here. – TL1.

While others had viewed it quite differently seeing it as an example of the “tall poppy syndrome⁹”:

“...would rather have somebody with good interpersonal skills and an all-round knowledge, than somebody who could come and really blow things away; there is a tendency to distrust somebody whose skills are greater than your own, rather than thinking “this guy can help us”. – CM.

Dissemination Mode – The managers expressed that the dissemination mode tended towards a formal and structured mechanism:

“We go through a structured process of business planning; all the ideas are captured and formulated that reflects the group of people working there.” – UM.

The managers felt an emphasis was placed on the individuals skills and learning over the team or organisational emphasis:

“In my experience to learn how to achieve something you find the ‘go to’ person and talk with them, there’s very little recording of that learning from experience. So the outcomes are recorded but not the process necessarily.” – TL1.

Learning Focus – The managers pointed out that there was a preference in the organisation for supporting incremental learning that encouraged existing team practices:

⁹ The tall poppy syndrome refers to a tendency to [negatively] criticise those who excel above the norms of their peer group.

“We only have an appetite for the small incremental changes. There are a number of pockets of questioning ‘why’ we do something a certain way... it’s creating the right environment to allow those changes to occur that is the challenge...How we do things can be too unstructured....we try to bring it into the formal planning cycle to capture and set targets, to get an effective outcome. – UM.

They observed that the current climate of needing to achieve savings and minimise costs was the dominant discourse in messages about change and learning received from their senior leadership. This recurring theme dominated conversations with this group of managers:

“Wholesale changes are driven by our chronic need to save money. We’ve got huge pressure on the rates and so if somebody presents a business model and says: “if we make this wholesale change to this entire process we will save x-million dollars a year” we’ll do it.” – BM.

Some also observed that the competitive culture around who was going to survive the job cuts affected how the team worked and learned together:

“There are individuals within the team who are now quite prepared to stab each other in the back...it’s unfortunate because I think they’re a fabulous team...if they would just stop doing that and play to each other’s strengths...We’ve got people who feel so under threat and are doing “the rat with his back to the wall” that’s a shame because as a group, they’re great. They could work brilliantly together.

Value-chain Focus - The managers clearly viewed themselves in the role of delivering a pre-determined (engineered) service product. The value chain of these services was strongly bounded by the defining legislation under which BCC (and all territorial authorities operate):

“The local government act prescribes that in various documents like asset management plans we will describe how we actually deliver on that service.” – UM.

As a result, compliance (with defined standards) became a key focus for the service delivery teams:

“We deliver services to a particular standard or level of services determined by the legislation.” – UM.

In this way establishing standards and defining compliance formed the guide for where and how value was identified in the process of service definition:

“We have prefabricated service models of tried and tested models. We just say: “let’s just stick the standard approach in” what is good for one is good for any.” – BM.

Some managers expressed concern that this inability for customers to negotiate the terms of their service exchange in the value chain, a deterministic pre-fabrication, could inhibit innovation and flexibility, especially with service delivery activities that were delivered by contractors:

“In my relationships with our [outsourced] service organisations, I can encourage them to innovate by the conversations that I have, but because the outcomes are set at the beginning of the three year contract, their innovative capacity is really severely limited.” – TL1

Skill Development Focus - From the managers’ perspective, the individual was the dominant unit of learning when it came to skills development:

It’s an admiration thing, the leaders admire those that can demonstrate their capabilities clearly, that’s hard to do as a group because you can’t share that credit. As an individual, you can push yourself forward and demonstrate your knowledge. It comes back to that [senior] management idea that you trust the individual you can rely on.” – UM.

They felt this was evidenced by the apparently low relative investment in team based learning opportunities:

“The budget we have for team learning and development as a team of twenty in this business unit is what we had for an individual in my

previous job. That in itself indicates that [the council] doesn't really take team learning seriously.” – BM.

On the other hand, some managers were enthusiastic about wanting to improve the skill development focus of their teams or groups of teams but felt that this was being discouraged by the cost minimising culture. It was acceptable to develop team skills as long as it could be done as a ‘zero sum’ or ‘within baseline’ exercise:

“My manager has taken a proactive approach to skill development; she’s trying to raise the bar but is meeting resistance further up and along the management chain for financial reasons.” - TL-1

6.2.6 Facilitating factors of organisational learning at Biggerville

Scanning Imperative - Overall the managers involved were enthusiastic and supportive of looking for new ideas and techniques to improve service delivery systems especially in looking for online alternatives to traditional service options:

“In the [Business Unit] context, understanding the service delivery requirements of the community and facilitating that understanding, actually improves on outcomes. If you fix the component parts, the inputs, line those up and get the [right] level of capability and systems in place then you can actually deliver [consistently] improved services. It is stating the obvious, but it is necessary.” – UM.

The managers had initiated projects concerning customer information and education using information disseminating Wikis, e-petitions and consultative techniques that their team leaders have become involved in:

What we are trying to do is get people that are doing the work to take the initiative in finding out what needs improving and the changes that need to be made.” - UM.

Some managers, felt that scanning for service delivery was occurring quite successfully for some activities:

“There’s both internal and external [scanning] it depends on what you actually want to deliver. For example, we have a quarterly newsletter that we send out to all builders and architects that we have to gather lots of information [about service expectations] for from within and outside the council.” – TL2

Performance Gap - The idea of a performance gap was something that the managers at BCC had an acute awareness of and could easily relate to. Some viewed it as a process issue but most viewed it as a team dynamics issue:

“[To address the performance gap] you really need to start and encourage opening up of the minds [of service delivery teams] but also give them the right tools. There are a lot of tools out there; they just don’t know how to use them. There’s a real [performance] gap, a real need to do something, there’s a real willingness for the team to learn but someone’s got to guide and lead them.” – UM.

Some of the managers felt that addressing the performance gap was a matter of providing feedback to the service teams to improve their understanding of what the desired service levels could be:

There’s a huge gap between what people [in the service delivery teams] say, do and believe. They genuinely believe that their intentions are one thing and then there isn’t the follow through to make it real. The gap, which may be closing as they articulate more and close the feedback loop, and you say: ‘well actually you said that but you didn’t really follow it through’. The more they get that feedback the more they are closing the gap. - BM

Concern for Measurement – The managers at BCC were concerned about measuring service performance, while they described the performance gap as a people issue they synonymised the concern for measurement of that gap with cost accountability:

“There’s got to be a safe environment created and yet an environment where your performance is linked to your salary. I do understand the constraints of a big team and the challenges of how do you get people to

reflect on what they're doing in a way that doesn't leave individuals exposed and vulnerable." – TL1.

This was also expressed in terms of wanting to instigate programmes aimed at establishing programmes that helped to build capability but these initiatives had met with reluctance from senior managers due to set-up costs:

"Without investment in team capability the concern is that it [service measurement initiatives] is not cohesive and things are done ad hoc. For somebody in my position who has to co-ordinate services and add consistency, you're fighting a losing battle because you're not empowered." - BM

Experimental Mind-Set – The managers at BCC felt that new ideas were mostly welcomed and endorsed at the service management level but they required clear support of senior management to progress:

"We are encouraged to come up with new ideas and present them to the CEO and the Management Board - a few of them have been taken on." – BM.

They were cautious about experiments that represented risk or do not align with the current management direction:

"Ideas are welcomed and [are] sourced from teams at all levels. But ultimately there is a direction, a pathway and a preconceived [managerial] view of what should be done, and those ideas that don't align with it are generally parked." – UM.

Indications were also given that although there was a strong culture of asking for ideas but that did not always translate into action:

"The rhetoric put out at the induction process and the leader's forum filled us with examples of where people at the grassroots come up with good ideas and processes that get adopted, often it doesn't transpire like that because of the costs involved." - BM

Climate of openness – Overall, the managers at BCC felt that the departmental

boundaries were clear and well defined but that the teams themselves were open to new thinking about service delivery. In some instances this was because the services required formal processes concerned with accreditation:

“You need to have consistency in how you do things. Within the team, we work with a quality management system for accreditation we have work instructions and guidance documents. So there are ways of auditing and measuring things to make sure people follow it. There is the ability to change it if it is not working; a quality improvement plan change request so anybody, no matter who they are, can put a suggestion through for something that they don’t believe is working well. – TL2.

On the other hand, other service teams that work to principles rather than standards had different concerns:

There’s some great leadership going on in the teams, they’ve got good systems in place to educate people, I don’t think it is lip service, making sure that teams feel part of the whole. I have reservations however, given the breadth of what we deliver, whether the philosophy of doing it through principles of citizen engagement that is, by necessity, a one-size-fits-all approach to best practice. So, we are consistent with the principles, but not aligned with the community that’s not saying that we’re necessarily doing it right or wrong. – BM

Continuous education – The managers were supportive of building on education and team capability but did not use the language of continuous education specifically:

“I’m a great believer that if you invest in the people then you’ll get better outcomes. A lot of people don’t make the link between the service outputs and all the various parts and if you do increase the capability of the staff for instance. So you really need to start [encouraging] opening up of the minds but also giving them the right tools.” – UM.

They also linked building individual skills with the risk associated with the tacit knowledge of the individual not being retained by the team or the organisation when the individual leaves:

“Institutional knowledge that’s captured and is held with the individual leaves with the individual. That’s a whole issue about continuation, transferring that knowledge.” - BM

Operational Variety – At BCC variety in their operational configuration was well accepted by most of the managers. They indicated that they were, where possible, prepared to be flexible about what approaches service agents used and were open to plurality in methods where a given outcome can be achieved in multiple ways:

“My style is to ask “what’s the outcome” first, if we get there in many different ways, structured or unstructured in terms of the skills then, as long as it isn’t wholly inefficient, people can get there in their own way with processes they are comfortable with.” – UM.

Some regarded variety as an essential team attribute:

“In the team which delivers the [face-to-face] customer service along with requests for information, they are more team based and having variety is a key strength.” – TL2

Multiple advocates – The managers reported that advocacy at BCC tended to follow the management hierarchy. However, there was some concern that ideas worthy of advocacy were hard to find due to a lack of cooperation between departments in the first instance:

“I’ve recently been involved in the service delivery around climate change and you’ve got cross directorate co-operation, good sessions and brainstorming but that’s an exception because it’s topical and trendy, so it’s been empowered to act. Sadly, within the organisation there’s too much in-fighting between the different teams.” – BM.

They did acknowledge though that there were some people who succeeded in getting ideas put forward while some in other teams were less so:

“We’ve got some examples of superb team management out there. And others, whose approach is one of a coterie; that actively prevents their team performing to their best ability, unfortunately.” – CM.

On the other hand, others cited examples where teams use variety and advocacy to progress ideas:

“There is support for multiple voices, it is a growing culture. If there is something that I see that is really not working I can say: “hey this really didn’t work and this is why”. – TL2

Involved leadership – The managers at BCC felt that the senior leadership was uninterested in the mechanisms of developing service capability beyond containing costs. They asserted that as long as the minimum metrics were met and complaints minimised then the senior management team would leave them alone:

“I haven’t seen the Chief Executive. I haven’t seen him, wouldn’t know him if he bit me. I’ve seen [Departmental Manager] twice. [Unit Manager] is absolutely fantastic she has tried to be the supreme professional. She has tried to delegate power to her team leaders.” – CM.

Others felt that the leadership team was “*missing in action*” when it came to involving service delivery managers in planning and strategy:

“The director in this unit never comes into the unit and has never communicated with us or consulted with us. We’re working in the dark and we’re not able to provide input, or have any influence on decisions at the top which are being made so there is a divorce between practice and leadership.” – TL1.

However, this view was not universally held:

“The culture has slowly developed over the years but it had got to a point where people didn’t see it. They don’t necessarily see the leadership group actually being involved or aware that with the repositioning for the future [consultation] process the vision, the picture that [CEO] has brought in is part of that. I see that that is now prevalent throughout the council. People know that they are involved for our team we talk about it a lot; it is part of something we have really bought into. – TL2

Systems perspective – There was a strong sense of awareness of holistic systems' thinking amongst the service delivery managers:

“One of the areas of emphasis for me was to build healthy relationships [with other business functions] to say: “ok, it might be that you’re not delivering for us, but what is it you need from us to help you deliver that?”...and recognise the problems that they might have.” – UM.

This was lessened to some extent by a sense of concern that support and coordination across the organisation could be better:

“For example, the service delivery frontline is citizen engagement. Those principles aren’t necessarily incorporated into the things that are done well elsewhere in the council.” - BM.

In addition, it was felt that a sense of departments blaming each other for systems issues encouraged a silo attitude in some units:

“There is certainly a blame culture of: “this can’t be achieved because that department hasn’t delivered” and a conflict is then created.” – BM

6.2.7 Case 3 Summary

The preceding discussion summarised the findings of the research conversations at BCC. It illustrated the variety of thinking, beliefs and attitudes that were at work in this complex service delivery environment. Not only were the managers operating in a complex organisational climate they were also navigating a complex customer setting. They expressed some concerns and frustrations at their leaderships understanding of some of their service delivery challenges. They also illustrated the way that multiple governing legislation and regulations can have on their ability to deliver effective services.

6.3 Case 4 – Smallerville

SCC is a relatively small organisation compared to BCC. It also had a flatter management structure that provided relatively open access to senior managers from service teams and team leaders. Overall, the senior managers and chief executive enjoyed a high degree of loyalty from the team leaders and middle managers. There was still a high reliance on the individual skills of long serving employees. Formal and informal rewards structures for initiative and service quality such as Kaizen^{TM10} seemed to instil a sense of value and pride. It was particularly interesting to note that the following interviews at SCC took place against the same backdrop of local government change and uncertainty as those of BCC but in SCC's case they seemed to be largely unfazed by the external concerns and confident that their leadership would successfully steer them through any changes ahead.

6.3.1 *Smallerville's customers*

SCC serves a smaller city area and population than BCC. Their customers are also made up of a wide base of abilities and motivations. This means they have to maintain the same variety of capability within their service delivery channels but typically at a smaller scale than BCC. Although as the SCC managers were quick to point out, the issues of delivering the services were similar regardless of scale.

6.3.2 *Manager Roles at Smallerville*

Contact Centre Manager (CCM) – Managed a team that works in shifts to answer calls coming in to SCC. They were responsible for creating many of the information artefacts that are used in the service intranet application that was accessible to all staff.

E-services online program manager (OPM) - Was the manager responsible for implementing and integration of the multichannel strategy at SCC. As such, she was a change agent and was actively involved in process redesign.

¹⁰ KaizenTM refers to a quality management product focused on continuous improvement by the Kaizen Institute Inc.

Customer service supervisor (CSS) - Looked after the physical face-to-face contact service desk functions and oversaw the service related back-office functions.

Service manager (SM) - Was the service unit manager reporting to the divisional manager, Operations who in turn reported to the CEO.

6.3.3 Systems experience at Smallerville

SCC serves a smaller community than BCC but has just as much diversity in its community. As a result, it has built up a core systems capability that is especially skilled at identifying needs and tailoring systems and processes to meet them.

6.3.4 Service Delivery Systems

Due at least in part to their small size and close geography, SCC understands its customers well. It uses its online and multiple channels to a large extent but also maintains a strong face-to-face capability with kiosk and over-the-counter service delivery technologies.

6.3.5 Organisational Learning orientations at Smallerville

Knowledge Sources – The managers at SCC displayed curiosity and awareness that they had a lot to learn from similar organisations elsewhere and that it was part of their role to seek that information. They also highly valued institutional knowledge and its transfer to new staff. They often attributed this thinking to the organisational commitment to TQM:

“I’ve been here [a long time] and have a lot of institutional knowledge...because we have participated in business excellence using the Baldrige™ criteria¹¹, it’s all about being able to systematically review, improve, ensure processes are up to date and be able to replicate the things that we do all of the time.” – SM.

¹¹ The “Baldrige™ criteria” refer to the Baldrige™ Performance Excellence program a formal systems quality programme.

An interesting take on external knowledge scanning came in the way they valued the strategic partnerships that they use to deliver some of their services:

“Because we contract out a lot of our services and a big thing is building those partnerships, we need them to either learn from them or we would want them to act like we act...there’s a two way process so quite often we include our contractors in our training so they know exactly what we know” - SM

Product or Process Focus – Again, the managers at SCC were very consistent in how they regarded the product/process focus – they were very much focused on process and understanding how their services are configured and addressing process issues in the face of service failures:

“You want to find out so that it doesn’t happen again. If you just think about what happened “my rubbish wasn’t picked up, fix it”. Actually finding out the reason why it [service failure] happened and be able to fix it. Although you resolve the problem, it’s doing something more so that hopefully it won’t keep reoccurring.” – SM

Documentation Mode – The documentation mode was something that struck a chord with the managers at SCC. Converting as much tacit knowledge into explicit documentation as was practical to do was very important for meeting their quality standards accreditation, so in this sense they had a strong favoring of public knowledge in their documentation mode:

“We are ISO accredited and we store all our documentation, forms, policies, guidelines on our staff intranet with an administrator who owns those documents. We have shared team sites and try to encourage people not to save things in their personal folders. We are audited, not just internally, that’s external audits too so that the internal one is peer reviewed making sure that the documentation is [reflecting] what we actually do” – SM.

In addition, tacit knowledge was recognised and operationalised in the form of delegated authority to use that tacit knowledge:

“A lot of what we do is trying to devolve and delegate responsibility as far down [to service agents] as possible; it’s that “first point of contact” thing. We have responsibility within each division so managers get a lot of responsibility about what they do in their team and how they manage it. A manager really needs to think about the risk - someone else isn’t going to come along and do it for them.” – SM

Dissemination Mode – The managers did tend to value formal dissemination over the informal but did recognise that informal dissemination of ideas was a valuable channel for them. They put most of their emphasis on the formal mechanisms because they felt that a key value for them was to be able to find service related information quickly and if is not, being able to add it quickly and easily:

“If I go somewhere and try and find something that isn’t there then I’ll make sure it gets added. I’ll say, “Look I went and I couldn’t find this. Can you make sure you publish it?” You know, anybody can do that....I’ll go right to the experts. – SM.

They also regarded formal dissemination mechanisms as being important to personnel issues such as succession planning for the loss of key staff in service delivery roles:

“By using the risk mitigation controls, steps you put in place, such as having somebody [knowledgeable] as a back-up.” – OPM

Learning Focus – The first area where the managers at SCC expressed some doubts about their organisation was in its ability to critically examine its own culture:

“We don’t make sweeping changes because we get resistance. We have got a culture that finds wholesale change difficult so we focus on making small changes and just chipping away.” – CCM.

They did value the idea of having idea generation built into their management performance criteria. However, they felt that this was directed more at

incremental change than at challenging the fundamental values of established practice:

“Our whole philosophy is built on continuous improvement so you can’t stifle innovation; you have to share the ideas. We can’t afford to “reinvent the wheel” everywhere so it is a big deal for us to share success stories. – OPM.

They did attribute the organisations small size as a possible explanation for why new ideas could propagate easily this for them helped to explain why the organisation was supportive of continuous improvement.

“We are not a big bureaucracy where it takes ten levels and three months to raise something. We can get all of our senior management team together quite quickly.” - SM

Value-chain Focus – The value chain for these managers was represented by opportunities to provide added value to the pre-defined (engineered) service exchange:

“I ask; what is the information our customer needs, how we are going to deliver that. On top of that, doing something that’s going to add value and either reduce or improve [the customer’s service experience]. – CCM.

In addition, they consider understanding where they add value to the organisation and its services was a useful means for establishing benchmarks to measure their performance:

“We look at best practice to compare ourselves to others but we also look at what our customers are asking us to do and needing from us and our politicians to determine how we design our [valued added] services.” - SM

Skill Development Focus – Individual competence (Senge’s personal mastery) was a comfortable concept for these managers. They regarded the organisation as tending to value group and individual learning in equal measures:

“The organisation rewards people individually and as teams and we very much – we have a reward system and you get a trophy...you can nominate an individual or a team because there are very strong teams in the organisation. They [service delivery teams] would rather it be the team that got rewarded than pull out one person.” – SM.

They also expressed some concern that it was possible to have too many service delivery related learning opportunities and that creating the opportunities to enact the learning was just as important as creating the learning opportunities:

“Learning [individual and group] has to be relevant but then you need to make the space for your employees or to expect a manager to make space for you to have the opportunity for learning and executing whatever we learn [to get the follow-through] otherwise we are wasting time.

6.3.6 Facilitating factors of organisational Learning at Smallerville

Scanning Imperative – The managers at SCC were supportive of scanning and valued the external voice, especially when it came from the customer perspective:

“The service design team does a lot of things like working with developers and the public. Having meetings and workshops and trying to get ideas from across the council and from the public to get all these ideas together into a framework for how we want the [services for the city] to work.” – CSS.

Some managers did express some concern that there was a small tendency towards “not invented around here” syndrome especially when it came to listening to high-priced consultants over long serving employees:

“From an IS perspective, when the business asks us to produce something else which is something out of our normal bounds then we call in the consultants. We try and keep it in house, but often we end up getting consultants in to do a lot of that [service design] work. You pay \$250 an hour you better listen to it. There’s always a temptation [by senior managers] to say: “The expert from outside says let’s do this so let’s do that then”. I think, this being a small organisation there tends to be a

little more respect paid to the wise [internal] voice rather than completely being walked over [by the external experts]. - OPM

Performance Gap – The managers at SCC were especially sensitised to looking for a performance gap and aware of its significance. Although there were a variety of responses, most managers felt the processes and procedures for service delivery could always be improved:

“I don’t think a lot of the processes around this business are in good order. We do look at the options [for service redesign] but due to funding and time constraints, we don’t actually have many options, we just have to go with what we have.” – OPM.

There was a feeling that at times the objective of getting services online superseded the desire to address the service performance gap through the process:

“As a result you think: “let’s just get it going [the online systems initiative] and get it bedded in” Then we try to solve the business process issues later” We ask: what does the business want? We give them that rather than saying: ok, what are the best options?” - OPM

Concern for Measurement – Overall, the managers had a clear concern for measurement linked to the performance criteria of their TQM¹² programme. They did, however, express some concern that the capturing of quantitative metrics was not the “*be all and end all*” of their commitment to measurement:

“You evolve and you realise that there’s no “one size fits all” it should be a conversation, just like you do with your staff, it should be a conversation with your customer, the people you’re dealing with” – SM.

Other managers took a more internal view of addressing the concern for measurement and wanted to build on the ethic of getting the commitment from service agents to use the technology they have to its full extent:

“The message is about quality of processes including the way that you are use applications. Are you keeping things up to date in the Intranet? Are

¹² TQM – Total Quality Management – an audited formal quality management scheme.

you using the Intranet/Internet to the best of your ability? All those sort of things, they do push us to have high standards.” - CCM

Experimental Mind-Set – The managers felt that there was a supportive attitude that endorsed an experimental mindset amongst service delivery teams as long as it was sanctioned by management. However, unsanctioned experimentation was not something that was seen as practical for their service delivery teams:

“We are encouraging people to put their ideas forth; “don’t be afraid of being put down” and often management is quite interested in hearing them.” – SM.

Having a champion and sponsor for experimentation was seen as being necessary to guide it through the adoption process:

“As part of the project that I was doing I had an idea to addresses a process issue. I put that as an “idea into action” saying: “please fix this process”. It was a very [publically visible] process, staff were not taking ownership. It was supported and something was done about it. Purely because my colleague was very high profile and the CEO was sponsoring it [the overall online-initiative project] so they didn’t want to see that fail so it did come down to the relevance of that idea [to the business]. – OPM.

The usual constraints of budget and time still prevailed at SCC when it came to supporting experimentation:

“Sometimes they don’t have time [to support experimentation] especially if it is going to be an IT project and that means changing applications. Someone might come up with a good idea, but we are planning to do an upgrade in two years’ time so that may not fit until then.” - CCM

Climate of openness – The managers at SCC felt there was a generally open attitude to team learning for service delivery. This was illustrated by the managers using the example of the CEO’s sponsored innovation programme which was formalized for the managers into their performance agreements and encouraged the challenging of established configurations and thinking:

“We are supposed to contribute three ideas a year and get them into action – SM.

Intra-organisational communication devices such as the Intranet and newsletters (New Zealand city councils still have a significant proportion of staff without routine online access, such as parks and maintenance staff) are regarded by the managers as essential tools for expressing the open dialog encouraged in the organisation:

“We are certainly working on communicating more; we are not allowed all of council emails anymore, instead we are looking at the ways we communicate and making sure that we are communicating to the right audience.” - CCM

Continuous education – While training and skills are valued highly among this group of managers. Continuous education beyond developing basic vocational capability was not seen as anything of particular value to the organisation:

“There’s a huge thing about knowledge, gaining knowledge, working in partnership, knowledge sharing, up-skilling, developing, and that’s all part of that business excellence and in doing that then you’ll impart that to the customer and hopefully they can get the knowledge they need when they want it.” - SM.

Operational Variety – The need to maintain consistency for meeting TQM compliance requirements presented a challenge to the managers at SCC who had a clear preference for being pluralist in their approach to operational variety: Variety was not seen as something that needs to be suppressed but does need to be managed:

“Some of the team have different ways of doing things and as long as the outcome is the same, that is ok.” – CCM.

For the service teams’ with systems that overlap with other service team’s systems operational variety is a clear strength and something to be encouraged:

“It’s the big kahuna¹³ really; it’s why we’re here. ... Most of my service is for internal staff. We’re here to provide a service as much as anybody is and it’s a very clear idea about how we interact with other officers and give them the same courtesy, making sure I listen to what they need and hopefully giving it to them.” – OP.

They had to balance that need with a desire to be outcome focused:

“They’ve all got the same KPI’s and there’s a lot of difference [in the team skills]. They have some things that they like so, one would manage this bit and someone else another bit to add a bit of variety but basically they are all doing the same work. – SM.

The desire to maintain consistency within the team extends to their perception of how the reward structure should be configured:

“They want to be rewarded as a team. If there is a bonus everybody has to get equal, the same, even the casuals and that presents some challenges when you’ve got policies that say you only qualify for the bonus if you work here permanently.” – SM

Multiple advocates – Championing of ideas is seen as a whole of management responsibility at SCC:

“We do encourage thinking and having new ideas, it doesn’t matter what level of the organisation you are. – CCM.

However, there is still an expectation that ideas will follow the normal management lines:

“If one of my staff has something they think that will work for the team and for our division they come up and I reckon this could work, I will take it forward to the divisional manager. It doesn’t matter who it comes from and from where.” - CSS

¹³ Big Kahuna – a colloquialism deriving from Hawaiian surf culture – roughly means: ‘Big chief’ or ‘Main event’.

Involved leadership – The managers at SCC identified that the senior leadership at tier one and two in the organisation had identified that leadership involvement in service delivery is something they wanted to work on improving and had several new initiatives underway:

“Every six weeks the team leaders have a meeting and the divisional managers come and they might have a spiel on some topical subject. For example we have a new website and one of the managers spoke to all the team leaders about that. The staff like their senior managers to be there. I have found that I like it too.” – CSS.

For some of the operational managers the senior management team is perceived as friendly and supportive but not really engaged with the reality of day-to-day service delivery:

“They just poke their heads in and wave that is it. They know we have a difficult job and we deal with difficult customers but there is no regular listening in and being really interested in the actual calls...It is an isolated unit. They talk about it being the hub but they back away from it. As long as they don’t get complaints, they seem to be fine with it.” -CCM

Systems perspective - Overall, the SCC managers had a strong commitment to systems thinking and development and took a holistic view of their service delivery systems when practical to do so. The managers did feel however, that at times, they had to drag the rest of the organisation reluctantly along with them:

“We have pulled teeth to get people involved and get people switching on and thinking about how information flows and to get a flat structure view of the council. You build a series of expectations and break down some of the walls and say we are all participating, doing a great job, but then they [departmental managers] can be really protective. When it comes to service delivery, they think it is a make or break situation.” – OPM.

Some of the managers felt that parts of organisation still regarded the lack of choice that citizens had in dealing with their council as a reason to undervalue service delivery¹⁴:

“Some areas still say; look, we are doing our best, they are our rate payers, they can’t go anywhere else, and there is no competition, so “they will get over it”. Because they don’t have to deal with the customer, they can hide whereas I have to protect my staff because they are the ones that are getting abused [if those other business functions do not deliver]. They [the service agents] are the ones that go home tired and stressed because the process was not right.” - CCM

6.3.7 Case 4 Summary

In this case, committed service managers with a strong leadership culture provided the foundation for their organisational learning culture. The presence of formal quality management methods had an influence on how the managers viewed service delivery. They extended this into their understanding of service delivery to a complex customer environment.

6.4 Summary of Dyad 2

In this dyad it has been illustrated that the two cases in the local government setting are good example of the systems complexity arising out of service delivery in multi-channel public organisations. This complexity has created a need for sophisticated organisational learning and knowledge management strategies. In the next section cases three and four are analysed together to explore potential common areas of interest.

6.5 Dyad -2 Cross case comparison of Biggerville and Smallerville

The following analysis compares the organisational learning in the local government cases. As before, the analytical lens is the means of doing the comparison.

¹⁴ Addressing the government mandated monopoly has been the focus of a lot of public policy reform. The notion of funder-provider splits in new public management was aimed at addressing that inequality (Miller 2010).

6.5.1 *Learning Orientations*

Knowledge sources focus – The managers at both organisations operate under the aegis of the local government act. They did however, gather further knowledge about how they defined and operated their service delivery systems quite differently. SCC used their notions of quality management as the reference point for their knowledge seeking activities. From that basis they actively sought information about best practice from similar organisations in different New Zealand territorial authority jurisdictions. In addition, they valued contractors and service providers as sources of new knowledge. In comparison, BCC viewed themselves as the local experts for their type of services and relied on internal expertise as their primary source. They did value external sources for knowledge of a more generic nature that they might apply. In addition, they valued knowledge of vendors and external consultants especially for cost reduction initiatives.

Product/process focus – The managers at the two organisations viewed accumulating new knowledge about service delivery quite differently. SCC managers regarded process or the “how” of the service was executed as being their primary focus while BCC managers felt their organisations valued the product or “what” of services as important. The BCC managers referred to the need to aggressively minimise costs and the requirement to report on the key metrics of operational outcomes as potentially explaining why this culture dominated.

Documentation mode – At SCC public knowledge stores were the favored documentation mode, this was explained as being necessary for their ISO accreditation and the desire to have systems with good capability maturity. Whereas at BCC the managers felt that there was an organisational preference for strengthening of personal knowledge stores and individual capabilities in a number of key personnel.

Dissemination mode – Both organisations had a clear preference for using formal methods for dissemination of service delivery knowledge. For SCC, building a repository of service standards and building explicit knowledge to facilitate succession planning was important. While at BCC the formal process of

supporting the dissemination of service related knowledge was to facilitate the building of individual capabilities.

Learning focus – The managers at both organisations favored incremental learning focus. SCC managers were advocates of continuous improvement and saw this as the means of channeling team learning into innovations that improved services. At BCC the motivation was different; they preferred incremental learning as a means of avoiding the risks they perceived as being attendant with transformative change. They also stressed that their mode of service learning was centered on their need to reduce costs.

Value-chain focus – The managers at both organisations shared a preference for the engineered approach to pre-determining their service delivery offerings. SCC was clearer in its shared commitment to adding value during the service exchange. On the other hand, BCC used its predetermined service design approach to build a shared commitment to compliance with governing legislation.

Skill-development focus – Both sets of managers showed a preference for building skills in service delivery at the individual level rather than the team. However, at SCC although the managers preferred building up individual skills they did not want to diminish the value of team learning either. The managers at BCC also indicated that they valued team skills development but felt it was under-supported at a financial or senior management level.

6.5.2 *Facilitating factors*

Scanning imperative – For the scanning factor both organisations shared the approach to reach out beyond the organisations borders to build new service delivery knowledge. At SCC, this took the form of reaching out to customer groups, contractors and interest groups such as property developers and bought-in knowledge from consultants. While at BCC scanning was used to build knowledge of new technology opportunities such as online options and for engaging with professional communities.

Performance Gap – Both groups of managers were sensitive to and aware of a service delivery performance gap in their organisations. For the SCC managers

the gap was a reality that they lived with and attempted to address as part of their commitment to continuous improvement. On the other hand, at BCC the performance gap was regarded as more of a team dynamics and a training issue that could be addressed by putting more focus on their management and team feedback processes.

Concern for measurement – Both groups of managers shared a similar level of concern for measuring the service performance of their service delivery teams. At SCC this linked clearly to their TQM efforts, but they recognised that simply identifying quantitative measures alone was not sufficient in itself and that it needed to embrace customer expectations and team commitment as well. Similarly, at BCC the managers recognised the need to develop suitable quantity measures but also expressed concern that performance measures could potentially have negative human resources consequences.

Experimental mind-set – Both groups regarded experimentation as being something the organisation was supportive of. They also shared the caveat that experimentation required endorsement from senior management to be acceptable. BCC managers also expressed a concern that senior management rhetoric was good at asking for ideas but not always as responsive as some would like. While at SCC experimentation was clearly linked to management advocacy and sponsorship.

Climate of openness – The managers of both organisations felt their organisations were open to new ideas and thinking about service delivery systems. For BCC this translated into two dimensions; the first was the need to maintain improvements to accredited process that required change management mechanisms and the second was the need for service teams to understand the principles by which they need to operate and the ability for service agents to participate in the conversations around best practice. While at SCC openness meant having ideas acknowledged and acted on at a leadership level and having sound intra-organisational communications.

Continuous education – This factor failed to resonate for the managers at both organisations. At BCC the managers took it to mean vocational capacity and knowledge transfer but did not have any great awareness that they would value

the life-long learning aspirations of the service team members. At SCC the managers took it to also mean vocational training and skills development.

Operational variety – The managers at both organisations had a willingness to accept plurality in the operational models of the service delivery systems. However, they bracketed this with the need to maintain their various compliance obligations. The BCC managers also treated operational variety as an essential attribute for service teams in some complex community engagement related situations. SCC managers had the need to be consistent to meet their TQM compliance requirements. They had to trade off the precision of not accepting variety with the team learning potential of being tolerant of operational variety.

Multiple advocates – For both organisations advocacy and championing of ideas was strongly supported. However, they also shared the same caveat that advocacy and championing of ideas had to be aligned with the management hierarchy. At BCC, there was some concern expressed that a lack of inter-departmental co-operation could inhibit the ability for advocacy to be done positively. While at SCC the managers regarded advocacy as a whole of management responsibility and expected that ideas being promoted would align with the management configuration.

Involved leadership – The managers' of the two organisations differed substantially in their descriptions of how their leadership functions viewed being involved in service delivery systems and management. At BCC the managers felt leadership was uninterested and that their primary focus was on cost containment and that service product or quality did not compare. While at SCC the managers felt their leadership was actively engaged with learning about service delivery practice and management.

Systems perspective – The managers at both organisations shared a valuing of systems thinking but enjoyed variable successes in achieving co-operation across other departments that they relied on or relied on them. BCC managers had a clear awareness of holistic systems' thinking but were concerned that support and coordination across the organisation could be better to mitigate inter-departmental silos. While at SCC the managers had a strong holistic view of their service

delivery systems but felt they were the champions of systems thinking in the organisations.

6.6 Chapter six summary

In this chapter, the findings from the two local government cases have been discussed and a cross-case analysis presented. The service delivery managers and their teams in the local government setting had to deliver services across multiple delivery channels to a hugely diverse customer base. Effective organisational learning strategies were well embedded into their management culture to enable the sort of knowledge management this context required.

Chapter 7 Dyad 3 – BigCol and SmallCol

This chapter follows the same three part format as chapters five and six. The first case in this chapter is case five known as BigCol and the second is case six known as SmallCol.

7.1 Introduction

The cases in this chapter were drawn from the publically owned, non-university tertiary education sector.¹⁵ BigCol is a large scale provider of distance education services for adult students. SmallCol is a regional polytechnic that specializes in vocationally-oriented technology course delivery to degree level. Both institutions are Crown owned entities and are accountable to a minister of the Crown through their operating board.

7.2 Case 5 - BigCol

BigCol is a polytechnic that provides a wide range of vocationally focused courses to trades apprentices and adult diploma students, and draws its students from a nationwide pool. BigCol's mandate comes from the Education act¹⁶ that defines its operating parameters and governance. The mission of BigCol is to deliver course materials via multiple channels, and provide education services within the scope of a Polytechnic.

7.2.1 Manager Roles at BigCol

Contact Centre Manager (CCM) – Runs the contact center, handles online, telephone and postal inquires.

Logistics Manager (LM) – Runs the team who process materials logistics requests and turn virtual service actions into tangible product materials responses.

Team Leader (TL1) – Runs the team that processes enrollment data and prepares the inputs into the logistics system.

¹⁵ Also known in New Zealand as Institutes of Technology or Polytech (the ITP sector).

¹⁶ See www.legislation.govt.nz

Academic Manager (AM) – Is responsible for the services offered to students meeting government requirements under the terms of the education act and is accountable to the institutions governance board.

Online services manager (OSM) – Looks after the implementation of online service delivery systems.

Business Analyst (BA) – Assists managers define service delivery mechanisms and translate business requirements into systems changes and specifications.

7.2.2 Systems experience at BigCol

The managers at BigCol had a diverse range of systems expertise. Some were specialists in systems definition and implementation while others were managers of other functions such as being an academic manager and regarded systems as something that came in a box.

7.2.3 Service Delivery Systems

Service delivery systems at BigCol were focused in two main areas. The first was the student enrollment and management systems and the other was e-learning focused learning management systems. The student enrollment system represented the primary revenue stream of the organisation and was the focus of much of the organisations conversations about effective service delivery. However, the managers that were focusing on e-learning as a way forward for the organisation were equally passionate that the learning management system was evolving into an equally important strategic system

7.2.4 The nature of BigCol's customers

BigCol's distance learning customers use both online and traditional postal channels depending on the course chosen. At the time of the research the decision whether a course was online or via postal channel was an academic delivery choice rather than a student choice. Some managers felt this was going to change in the future.

7.2.5 Organisational learning orientations at BigCol

Knowledge Sources – The knowledge sources focus at BigCol favored listening to the external voice because of the systems lifecycle stage they were currently at. However, long service within the organisation was also regarded as a strong point by some managers and as a limitation by others. The feeling overall was that generally internal expertise could be relied upon; but in times of restructuring as the organisation was currently going through, external sources were being valued more highly:

“People have been here a long time and know a lot. I find that when new managers or executives come in, they go for the external knowledge, a new person is not so trusting and trusts external knowledge more” - CCM.

The managers at BigCol recognised that they could not have all the service delivery systems expertise they need internally and had a tradition of bringing in outside consultants to assist. However, some felt that the organisation had a tendency to become overly reliant on that external voice:

“A lot of our staff believes that if you get an expert in they know more than you. Whereas, I often know more than they [external consultants] do, about certain aspects.” – AM.

They also felt that the leadership at BigCol saw the external ideas as being a means of making efficiency gains:

“They [leadership] think if you bring in the experts to talk about it then you are really going to get the good deal, but not realising that they have already got it [in the form of the in-house expertise].” - AM.

Product or Process Focus – The dominant discourse amongst the managers at BigCol was the language of process:

“How you get there is far more important because then you know how it went wrong, or right, there’s success and failure, but you’ve understood what caused the failure so it’s not going to happen again so you’ve learnt from it.” – LM.

The managers did have an outcome focus as well in the form of student satisfaction. The customers for BigCol are voluntary, paying customers so the commercial focus comes into play:

“If the student has been quoted incorrect fees, that cause dissatisfaction to the student, and the student is the primary focus around here, they pay our wages.” – TL1

Documentation Mode – There was a strong tendency among the managers at BigCol to value documentation of explicit knowledge:

“Personally, I document everything and make it publicly available in our staff resources area where I put up everything, changes we have done, hints, tips.” – OSM.

This is perhaps consistent with the preference for viewing their organisation in the process-led manner mentioned previously. A lot of the manager’s documentation mode efforts are aimed at creating and maintaining documentation about their various processes:

“We have our own internal knowledge-base system. We felt we had to develop that completely in-house because all our knowledge was on paper, we had huge volumes of paper. We have now put that all into an online system we call our knowledge-base.” - CCM

Dissemination Mode – Despite being process and explicit knowledge centered, the managers drew attention to the matter of knowledge silos existing in various parts of the organisation that were not readily shared with others:

“There is a culture of not sharing. We have staff that reside in the same office and don’t share information” – AM.

There was relatively little importance given to informal communications or communities of practice. Instead, there was a clear desire to share knowledge as long as it sat within the departmental and organisational boundaries within BigCol:

“To me it’s not private knowledge if I am away somebody needs to know where to find information to continue my job, or aspects of it. Everything I do is freely available to my team. - OSM

Learning Focus – Some of the managers recognised that there were clear silos of expertise in the various delivery teams and had developed strategies for trying to break down those barriers:

“A lot of effort has been made to work with the long serving staff who says: “we will do exactly what we did last year because it worked”, but the students, technology and the world are different.” – OSM.

For some initiatives such as adopting the online course delivery channel it was felt that new staff represented the opportunity to adopt new service delivery practices:

“We have a lot of staff that have been here for a long time and are very rigid in their thinking, and are not open to change. It’s only when new staff come in that we can catch them [to use the online service delivery channel].” – BA.

Value-chain Focus – For most of the managers at BigCol the organisation has an engineered focus in that it puts a lot of effort into pre-planning the way that it delivers services or via various service delivery projects:

“We tend to engineer things, we pretty much take what our product is, in terms physical material, and say “what do we have to do to get it in the box and out the door?” – LM.

They did however; express some frustration that sometimes the reality of meeting semester dates cause the engineering process to be circumvented:

“There seems to also be a rushing method where there’s deadlines to meet so it doesn’t matter on what level of quality or percentage of quality that that service or product is at, we just roll it out anyway.” – TL1

Skill Development Focus – Skill development at BigCol was mostly viewed as something that was best developed as a group. Most service delivery staff work in teams at BigCol, so the team was seen as the focus of skill development:

“There is a lot of group learning; individual expertise is valued only when people are employed.” – AM. “It’s also about trying to share that group learning it and make sure that everybody comes up to that level. We’re pretty good at that, there’s quite a bit of opportunity for training and sharing.” – OSM.

For some activities such as addressing situations that require developing new skills learning is contained to solving the immediate problem and if the complexity increases and goes beyond the operational team it is devolved to a business analyst:

“A lot of times we actually try and figure issues out within the team. Between me and my team leader and a couple of the others we try and nut out why something has happened but we have a business analyst that we go to who’s our expert.” - LM

7.2.6 Facilitating factors of organisational Learning at BigCol

Scanning Imperative –The managers at BigCol were complimentary about the way in which the organisation values searching for new knowledge about good service practice:

“I think we’ve got a pretty good system, we scan across everything, if anybody wants to change something it goes to a change request committee so everybody has a look at it and it won’t be approved if other departments don’t agree with it.” – AM.

They were also positive about the way in which senior managers view objectives for the whole business and use that to set priorities:

“We have a strong focus this year on students, so any development initiatives that don’t directly affect students are lower priority this year.

Our focus is now to do changes that really have a bigger impact outside than inside. - BA

Performance Gap – The managers expressed concern that projects and service development initiatives could become drawn out because it was difficult at times to get people to agree on what needed to be improved:

“We had to cope with trial and error; we only had that person involved because the right person was away. Bringing in the wrong people for a certain type of project can slow down the timeline of a service delivery project.” – TL1.

In addition, some expressed feelings that the performance gap was related to service teams being staffed by whoever was available rather than selecting the ideal team members for the role:

“I’d like to think that this place employs the correct people for the correct job but sometimes they don’t. – AM.

Concern for Measurement – There was a very clear concern for measurement amongst the managers, especially around key activities such as student enrollment processes which are time and financially critical for the organisation. Some frustration was expressed that a lack of integration in the service delivery systems causes duplicate data entry that can cause service delays. The managers found this unacceptable and were working to rectify it:

“In our peak time we work six days seven am to seven pm just re-keying a lot of information because during peak semester students enrol on line because they want to meet the deadline.” – LM

The concern is translated into a desire for maintaining student satisfaction with the enrolment process:

“I’m very much aware of the frustrations and where improvements can take place. “If a student rings up the day after they’ve tried to enrol online and the call centre can’t see it in the student management system, it’s not a good look.” – TL1

Experimental Mind-Set - The managers' appetite for experimentation was not great other than for management supported initiatives. Innovation was seen as a good thing and something that was necessary but this needed to happen with due process in support of it:

“For example, we’re trying to get students to complete the application form online [rather than filling in a postal form] so then it gets directly into our student management system, which would save duplication by our contact centre staff.” – TLI.

This sort of initiative requires consultation through the change management process in the organisation. Practical considerations, such as budget constraints and workload also affect how these managers view “playing” with new ideas:

“Every time we develop a [online] tool, we review it the next time they [operational staff] are going to use it to see how it worked previously. Historically we don’t do that well. It’s a case of: “this is what we’ve got and that’s it”. That boils down to time frame and budget. With a tight budget we are not going to review last year’s work and improve on it because it costs them [operational managers] to do that.” - OSM

Climate of openness – Some of the managers expressed concern that despite the formal processes in place for consultation and communication strategy communication is prone to getting stalled, and not progressing into clear operational priorities:

“We have been delivering services on line for seven years and we still don’t have a direction or a mandate, we can’t say, well this is the way we are going, this is how we are going to do it, because we don’t have an end product which is horrendously frustrating.” – OSM.

Overall, the managers felt that their communications with each other was mainly open and constructive but that there was still a lot of work to do around making that a consistent practice organisation wide:

“For all the talk about continuous improvement we still work in individual silos and individual business units, some people and business units buy

into the continuous improvement and improving our systems and processes, where others tend to sort of stay in the old ways and say: “we’ve been going with this manual Excel spread-sheet for so many years, we’ll just keep going with it. I don’t think the communication is as open as it should be, and then that causes issues internally,” – TL1

Continuous education – Being an organisation whose core product and mission is adult education it was not surprising to hear that the managers valued continuous education highly:

“It’s what we do really, we’ve put a lot of emphasis on staff being involved in their own learning and putting forward ideas over the last year or so, so.” – AM.

Some of the managers did make the distinction however between encouraging continuous education in their service delivery teams and qualification or accreditation seeking:

“I have valued continuous education throughout my career. My career has changed a number of times because I just absorb information, though, in this role if you’ve got the skill to do it, the qualifications are to a certain extent irrelevant because you need hands-on ability.” - OSM

Operational Variety – The managers at BigCol expressed a curious mixture of pluralism and absolutism when it came to valuing plurality in their service delivery teams. Their attachment to due process was clear, but their enthusiasm for having variety and plurality within their teams was just as enthusiastic:

“We have policies and guidelines that we must adhere to, but sometimes it comes down to the individual, our client is the primary goal and servicing that client. Myself, I, stick to guidelines but if I can find ways of give good service to the client without compromising those policies and guidelines I’ll do it.” – TL1.

Some expressed that they value getting the end result as long as the service experience remains consistent they have a tolerance for inconsistent application of

the processes. This may be a consequence of having a service delivery system that requires pragmatic workarounds on a regular basis:

“When we’ve done pilots it’s amazing how many different ways people do things, trying to get it to be done one way is important. It’s much better for training and much better for sharing and understanding and getting the right result at the end.” – AM.

They acknowledged that their recent forays into the realm of TQM had challenged their thinking about plurality:

“We’ve been doing a lot with the Kaizen™ Institute recently and part of that is standardisation so doing things the one way, and everybody can identify them, documenting one way and then people doing it that way.” – AM.

However that manager’s view was not universally shared within the service team where variety was also valued as strength and a means for stimulating debate about good practice:

“When we appointed my assistant manager, one of the things I wanted was somebody that didn’t problems solve the way I do. The whole team is like that, they have their specialty and they have differing opinions and that’s where you get the discussion going so it’s a development thing.” – OSM

Multiple advocates – Advocacy at BigCol was seen as being a formal process for initiating change. The managers reflected that they sometimes found it frustrating to have to get new ideas ‘signed off’ before they could progress with them:

“I find that sometimes hinders the process of servicing the customer, so, for some minimal changes we don’t; we just go ahead and change them. It’s about having that flexibility. Otherwise we just feel like we’re just in lock down and we have to get approval on everything.” – TL1.

Individuals with innovative ideas were recognised by leadership and valued for their contributions but not championed in a formal sense:

“It comes down to the individual, the person who goes above and beyond the call of duty, we have monthly reward systems, a bottle of wine or whatever” – TL1.

There was some frustration however that some managers did not feel motivated to champion new ideas from outside their own teams:

“Some managers will never pass suggestions down to their staff to discuss. I have meetings with faculty staff every month; the idea is that they relay that information to their staff. I talk to their staff; some of them didn’t even know we had the meetings. The managers’ are containing it [information about new delivery models] because they don’t want the change. - OSM

Involved leadership – Overall, the managers at BigCol were supportive of their senior management and felt the organisation was on the cusp of a new and exciting new phase of its evolution:

“We’ve just changed our Chief Executive and our emphasis is coming back into the Polytechnic itself, so I think things are changing. Operational staff needs that sense of direction and clear vision from above and I don’t think we’ve had that in recent years but I think that’s coming now.” - AM

Systems perspective – Systems’ thinking was hard to identify for the managers at BigCol. They had a desire to think holistically about their systems but felt hampered by the entrenched silo behavior of some staff:

“I think we still work in individual silos, service level agreements seem to vary somewhat. I think there can definitely be improvements there.” – SM.

Some managers felt that whole systems’ thinking was a senior leadership responsibility and that it was their job to look after their component only:

“We tend to pay lip service to the holistic approach. The reality is most of us are focussed on doing our bit and assuring that it is working properly.

I think that it's fair enough for people that are at the top level to be interested in the whole system.” - LM

7.2.7 Case 5 Summary

The discussion in the preceding sections has summarised the findings from the BigCol case. This case illustrated another public sector service delivery setting where effective organisational learning was an important part of their service management strategy. In the next case another education provider with a different service focus is explored.

7.3 Case 6 – SmallCol

SmallCol is a regional polytechnic that provides a wide range of vocationally focused courses to engineering, technology and service related trade groups. As with BigCol its mandate comes from the Education act and it is a Crown-owned entity.

7.3.1 *SmallCol's customers*

SmallCol's customers are students choosing when and how to undertake their vocational training. Many are choosing online or part time options to fit in with full-time employment. As such, SmallCol had developed a range of online and face to face student engagement approaches including cyber-commons¹⁷ and online mentoring.

7.3.2 *Manager Roles at SmallCol*

Student Experience Manager: (SEM) - Managed the whole student enrollment and contact center experience both face to face and online. Ran the student advisory group.

Academic Manager (AM) – Was responsible for the enrollment services offered to students and was responsible for compliance with government requirements.

Learning Centre Manager (LCM) – Looked after learning focused interactions with enrolled students, the learning management systems, and designed student service related facilities including online resources, library and materials allocations.

7.3.3 *Systems experience at SmallCol*

The managers at SmallCol were technically aware and clear about the strategic value their systems represented. They varied, however, in where they put the emphasis about which systems were most important depending on their job function. Unsurprisingly, the academic manager felt the enrollment system was

¹⁷ Cyber-commons in this setting was an e-learning initiative that uses a mixture of online education services, electronically enabled libraries, study areas and related student support services.

the pivot point of the whole organisation. And the Learning Centre manager felt similarly about the learning management system.

7.3.4 Service Delivery Systems

SmallCol's customers were typically young adult students. Many of the students came from background of poor success in the compulsory education system. As such, the managers at SmallCol were very sensitive to meeting the needs of these customers in an engaging manner.

7.3.5 Organisational Learning orientations at SmallCol

Knowledge Sources – Internal knowledge was valued in the service teams. The ability to think critically and analysis skills were regarded as necessary to contribute to the teams learning:

“[Critical analysis] is one of the areas that my team has to do; they can get quite annoyed with me because I am very questioning. I will say: “why do we do it like this?”, “How does this work?”, “Why should we do it like this?” I am always trying to encourage them and they do joke with me about it. We do need to keep questioning everything. Sometimes it is actually hard to have the time to reflect, question and then implement but they have to because we haven't got [established] systems for what we do and they have had to think of new ideas. They have done it very well. But, we probably have not had as much time to look outside as much as we would probably would have liked to. – SEM.

However, some felt that the lack of consistent guidelines about where knowledge sources should have come from creating an information gap between departments:

“There is not necessarily a set of strategies or guidelines or even an understanding necessarily of what recognising our internal knowledge could mean and thinking about the whole of the organisation, if the knowledge that resides in my area about what we do and what we achieve and how we interface with the students is not widely understood or widely known about.” – LCM.

This was exacerbated by some tension with the way in which the student advisory contact centre had ‘taken over’ the institution’s primary interface point with students and had removed some of the face to face and online filtering responsibility from the enrolment services function:

“I’ve got staff that have been here 15 years, their body of knowledge is huge and then you put in a student interface and student advisors and student questions are so diverse and so broad that there wasn’t really any understanding of how big that body of knowledge was. The challenge this year, is having taking the public face away left us with that body of knowledge, which isn’t recorded anywhere, and now there’s a lovely big hole there [in the student advisory group] so the real challenge is trying to document that body of knowledge but that requires resourcing and then doing this documentation process to bringing these people up to speed – that’s been our tension point; you can’t just switch that body of knowledge over.” - AM

Product or Process Focus – The managers described SmallCol as being a “very outcomes driven” organisation that favoured taking a what-happened perspective to service failures:

“Sometimes, we don’t want to focus on service, maybe we haven’t got the tools to understand, evaluate or measure it I couldn’t say”. – SEM.

As a technical college, the organisation’s mandate came from central government and the outputs focus tended to be in keeping with the government expectations for their sector:

“We do tend to focus on those outputs that are driven by government policy. [senior management says:] ‘I don’t care what the inputs are that actually led to this as long as they give us the results that we want at the other end.’ I think there is a bit of change in that attitude in that at the moment something that is coming slowly.” – AM.

In keeping with the government’s efficiency drive SmallCol had experienced a pressing need to reduce costs. They sought to do this by eliminating redundancy and staying focused on bottom-line reporting:

“We are really asking ourselves what we do with our limited resources and establishing where the duplication is in our process and, if it is there, we’re getting rid of it and that’s creating some big tensions in the organisation.” - LCM

Documentation Mode – SmallCol has traditionally relied heavily on individual knowledge. Following recent consolidation of functions it had recognised that having too much experience residing with key individuals was a risk that needed managing:

“In the existing culture, knowledge often resides just within one person’s brain or job area. The CEO is making a very conscious decision at the moment to try and break that down.” – SEM.

This is not just a knowledge management risk but an operational and logistics one too:

“We are now much more team knowledge driven, and aware of business risk. We’ve got a juggernaut timelines that are totally non-tradable so the collective knowledge in the team is way more important. I did have individual gurus and I’ve killed it off because the business risk to me is huge and I cannot afford it, the government is putting on extra pressures [to reduce costs] and I haven’t had a full complement [of staff] for the last six months between leave and sick leave.” - AM

Dissemination Mode – The managers referred to the dissemination of knowledge that went on in their respective teams in a positive manner overall:

“There’s a lot of the water cooler stuff that goes on. We are trying to disseminate more formally with a staff intranet and we are supposed to get weekly briefings from our executive management team that is meant to filter down. But, I don’t know whether that adds up to a constant conversation about service practice.” – SEM.

They also expressed that there were other styles of communication such as communities of practice (CoP) that staff had shown interest in, but were not quite ready to begin using:

“There is not that [CoP] kind of creative forum where people can talk yet. Sometimes we have quite focussed meetings on things like the weekly enrolment meeting where you have heads of schools but it is usually quite focussed towards targets and marketing” - LCM

Learning Focus – The managers indicated that learning in the management teams at SmallCol had usually taken a single loop approach but that there was, following recent changes, more of a willingness to use double loop learning strategies as a group in order to challenge established thinking:

“We’ve seen a lot of change in the last twelve months traditionally it is more incremental rather than going for a major culture change. We have got a strategy now for looking at alternatives but we haven’t had time to bed it in. It is one of the things around customer service and service delivery that is on the “to do soon” list, that and “transformational leadership” – SEM.

The managers seemed willing and capable of taking a critical look at themselves and their team practices:

“I do think the mind-set towards learning about good practice is changing. We’ve had some really good comments from people, staff and students saying things like: “really positive”, “friendly”, and “welcoming”. For the whole organisation we need more service training targeted at staff, we’ve had a professional development day and this year it was very positive.” - LCM

Value-chain Focus – The managers described their approach to service planning as involving sketching out the broad service objectives then working out the details during the actual delivery refining things as they went along. They felt that they were moving into a delivery centred pre-determined approach:

It is much more process driven now, it’s about thinking about just some of things like having materials designed in advance. It’s one of those things that take a long time and there’s a lot of [individuals who resist change] barriers to get around. It’s about, continuing to encourage the staff to

think about the success of the student and what that might mean for the student.” – AM.

They put a lot of emphasis on understanding the target audience and focusing on the team learning that enabled the service practice to be built up alongside the processes:

“We’ve got a very strong marketing focus that drives the customer service process. Take our student experience team; our student advisors, there was a lot of work done establishing how we manage the student interface. Setting clear expectations etc., but the reality has been something in between.” - SEM

Skill Development Focus – The managers felt that at SmallCol the skill development emphasis still came back to individuals holding the majority of the knowledge (Personal mastery) and whilst there was some team development in the newly established teams there was not enough organisationally:

“I don’t think we encourage people to be able to be able to do different types of jobs. I think we still rely on individuals I think we are slowly moving away from that” – AM.

They suggested that the skill development emphasis depended on how long the team had been together. Some of the team that have been together for a long period had individuals who retained their position by being the “go to” person, but that was no longer considered good practice:

“If I’m with ‘my rock’, the [relatively new] group [service delivery team] which are absolutely superb; we do team learning all the time, If there is a change to be done, we’re on the white board, we go round it and we do it all as a team thing.” - SEM

7.3.6 Facilitating factors of organisational learning at SmallCol

Scanning Imperative – The managers believed there was no easy way for them to scan the whole organisation for emerging ideas:

“Internally we do that the old fashioned way: developing relationships with people, building up networks at a manager level and an organisational level and me feeding it down to the team” – LCM.

They also relied on informal devices such as monitoring of other technical colleges via their websites and brochures:

“Looking at other people’s information to see how they do enrolments, [disseminate] course information, and the marketing team do that too. I use my contacts in other polytechnics but it is not something that we have had much time to focus on. - SEM

Performance Gap – They reported that in their terms there was a substantial gap between where the service could be, compared to where it was now but they had only been on the current development path for a short time and there was still a lot of work left to do:

“We talk a lot about the service philosophy and how we want to achieve it, how we’re going to get there and the steps we are going to take, but there is still quite a gap.” – LCM.

They accepted that their operational reality got in the way of delivering optimal service and that they had to make the best of any given iteration of the college’s teaching cycle to introduce service changes:

“You can always do a little bit better, they [the student experience team] do very well given the amount of training they have, the systems, resources and the recent changes but there is agreement that we could be doing more.” – SEM.

Concern for Measurement – The managers reported that they felt concerned that they had mixed messages about what their service levels should have been and that this was something they were working to address:

“At times, there’s a real sense of despair that the rest of the organisation isn’t in the same shape around service delivery [as the service desk] and so we are quite dependent on stuff getting to us in the first instance.” – SEM.

At a marketing and senior management organisational level, customer satisfaction was measured through formal student satisfaction surveys. However, the managers indicated that they needed to be careful how they used those measures in case they sent the wrong message to their service delivery teams:

If we measure it [student satisfaction] all the time you would just make yourself paranoid. We allow the team members to think about going and doing “x, y and z” tasks without interruption. Then achieving those tasks successfully is a positive measure that shows capability. Anecdotally, we don’t get complaints; so far we have not had any formal ones.” – LCM.

For meeting the standards requirement of government for enrolment and process management they acknowledged that the key metric was turnaround:

“If we receive an enrolment it is on the system within 24 hours and if it requires input from a school then it is a 24 hour turnaround for them. It has to come back within four days to complete the whole process within five working days. At peak times, I run the reports and send them to the schools and show them their status, it causes them hours of pain because I make sure the report goes to the executive teams as well.” - AM

Experimental Mind-Set – The managers described themselves as being in favor of experimentation, their language was more that of innovation and preferred using the established hierarchy and approval channels for encouraging ideas:

“As long as we have the sign off process if there is money involved then it would be a more formal process.” - LCM.

They indicated that they were supportive of experimentation as long as the business case and benefits realisation processes had been followed and they did not perceive any contradiction in this position. Overall, they were tolerant of failure as long as it represented a learning opportunity and was not too severe or repeated:

“People are allowed to make mistakes. It is just them. I try to discourage them from making the same mistakes repeatedly but no I just don’t think

you can operate healthily if you are not allowed to make mistakes.” – LCM.

While these attitudes represented the service managers’ discourse they did not necessarily feel that the leadership of the organisation shared the same appetite for failure:

“I’m not sure my boss necessarily sees it like that. I keep saying “guys you’ve got to be prepared to fail”, if it doesn’t work that’s fine, I can live with it. There is certain latitude that I’m given because we have been so successful; I suspect that I’ve pushed too far in some areas. I now know where the boundaries are, sort of.” - SEM

Climate of openness – While the managers asserted that the organisation maintained a climate of openness overall, they did describe aspects of a top-down managerial preference:

“We have weekly team briefs that help to build better understanding. Sometimes the debates are negative and you have to stand on them and pull them back in, other times we talk about how we learn from this. Recently, we developed a set of service guidelines that the whole team developed, they just put them together and decided, they don’t always follow them but that’s okay, they decided they were appropriate.” – SEM.

For some of the service teams the requirement to comply with external standards had placed performance expectations on the service teams that seemed to operationalise a command and control management style:

“Oh my crew know, by god; my crew knows if they’re making errors. I run the reports. Often I will just gather together the little things and say: “explain to me why this is happening and what’s gone wrong; do we need to change the process?” I love being challenged but sometimes people just want a symptom fixed, they don’t want the system changed they just want their problem to go away. It’s a constant tension between: “can I actually hold back the juggernaut?” and really make a change but create a whole pile of noise for the organisation while it’s done or do you roll over and think: “I will just try and catch up with it”. - AM

Continuous education – The managers reflected that training and capability is important to them, but education for its own sake did not feature in their conversation:

“I think they [service delivery team] have a pretty good understanding of where their strengths and weaknesses lie. There’s still a lot more to learn but we do understand who has got areas they enjoy more and also recognise where we need to be developing education programmes for them so even if they are not necessarily fantastic at it now does not mean they can’t be fantastic in the future.” – LCM.

They described the team culture as being supportive of continuous education but reflected that the established team dynamics also affected how it was thought about:

There has definitely been a “if you can stand up and be a tall poppy and you’ve got the knowledge and you’re a guru you will get a pat on the head. [From management, at the expense of the team culture]” The culture has taught them [the service delivery team] to do things a certain way. It’s not about necessarily them firmly believing that that’s the right way to do it and when you talk to them it’s interesting the group dynamics going on. When you talk to them individually you often get a slightly different view [of their attitude to individual learning]. “That’s exceedingly hard to change. I find myself challenged by that every day with my team.” – SEM.

They also commented on the reality of being a government agency and the obligations to be conservative about spending:

“They might have wonderful ideas about further education, but the reality is we are on a government dollar and that government dollar carries compliance obligations, you are not out in an industry where you can just go flick, flick away we go, there’s a whole pile of little rules sitting here.” – AM

Operational Variety – The managers regarded operational variety in terms of competence and the ability of their teams to cope with change in business processes:

“They now have to do so much more, so much more cross functional work than before. And the reality is that we are resource tight and there is no capacity to carry different competencies. In every one of my teams I have a weak link.” – AM.

They reflected that they had to work with the team they had and not the one that they would necessarily choose from the outset:

“The current staff have quite a few years’ knowledge and experience so getting them to change is part of the challenge. Within the team there is a range of different personalities and that makes a difference, some of those personalities do cherish differences and thrive on them.” - SEM

Multiple advocates – In general, ideas were championed by the managers. They did however, retain the right to determine for themselves which ideas were worthy of promotion and championing. There was little support for ideas that could be self-promoted:

There is a little bit of protectionism about who can come up with ideas for certain areas. It depends on the individual teams, sometimes you have got to be a little bit sly in making them think it is their idea. – SEM.

They also commented that advocacy and championing came down to individual relationships. The managers felt that their status in the organisation could help ideas gain traction that they otherwise would not get if the originated in their teams without their direct endorsement:

“If it comes via me it will be acknowledged. The organisation is quite hierarchical so I can facilitate that for them. It also depends on the subject; some are touchier than others. I’m a bit of a mother hen when it comes to protecting my staff so I say: “bring it to me and I will take up” rather than exposing them to potentially negative responses.” - LCM

Involved leadership – In the main, the managers did not see or want additional senior manager involvement in the service delivery processes – they preferred them to remain disinterested. But they did reflect that a lack of communicated strategy for service delivery was a concern that they felt needed attention:

“Our leadership doesn’t engage in service delivery strategy, there are days that I think “I’m making strategy on the fly, there is no shared vision for what that means for the organisation. In some areas we are building a strategy around a vision for service delivery which I do not think has come from anywhere but us and that’s a really dangerous place to be in my view.” – SEM.

They also commented that the process of doing a business administration review looked at how the organisation could manage its service quality that did involve divisional managers around service expectation as potentially helpful:

“There are some really good cross functional management groups where you’ve got the schools and me and the customer service team together in a weekly meeting and the business analyst is there; in our space. They will often just walk in and ask my crew things even on an informal level.” - AM

Systems perspective – The managers observed that when it came to systems thinking they were not encouraged to take a whole organisational approach as and they had a tendency to compartmentalise issues and rely on communications such as “water cooler conversations” and similar informal networks to learn about what their peers were doing within the organisation:

“There is a governance group which I imagine should pick up a lot of this but I am still quite aware that other things filter out. They [the governance group] have done a lot of work recently though, talked to all the managers about requirements and things so again, they interviewed me and I talked for a very long time, as usual.” - AM

They pointed out that the focus on improving efficiency had been identifying redundancy and removing bottlenecks that generally had resulted in centralising of business functions:

“The issue is there has not really been about analysing the amount of work there is and working out how many people you need to deliver that. We put more people in but when they put more in they then ramp up the service expectation again so there is never any kind of status-quo where

you go: “right, we can cope with this amount of people”. We had 15% extra enrolments this year and we didn’t get extra resources.” - AM

7.3.7 Case 6 Summary

In this case it was seen that the managers at SmallCol are effective organisational learners and believe strongly in building service teams that can delivery services efficiently. The do, however, acknowledge the limitations of their operational reality to the extent that there is a lot of organisational learning and knowledge management activity they would like to do but servicing the daily imperatives inhibits those opportunities.

7.4 Summary of Dyad 3

In this dyad it has been illustrated that the two cases in the tertiary education setting provided sound examples of the operational challenges facing managers of service delivery in multi-channel public organisations. These managers have had to develop organisational learning strategies that enable them to cope with a changing customer demand and organisational change at least in-part due to of e-learning introduction. In the next section cases five and six are analysed together to explore potential common areas of interest.

7.5 Dyad - 3 Cross case comparison of BigCol and SmallCol

7.5.1 Learning Orientations cross case analysis of Dyad 3

Knowledge sources – Both colleges valued knowledge sources highly but differed in whether they favored the internal or external voice as their primary influence. BigCol favored listening to the external voice but also felt that the internal expertise could be relied upon and had a tradition of bringing in outside consultants to assist. Some felt that the organisation risked becoming too reliant on that external voice and that leadership saw the external ideas as being a means of making efficiency gains. In contrast, SmallCol favored using internal knowledge and skills for building service delivery systems knowledge. They had achieved this by building and encouraging critical thinking and analysis skills within their service delivery teams. Although some felt that the lack of formal

knowledge management strategies could be creating an information gap between departments.

Product-Process focus – Both colleges were operating in a similar fiscal climate that puts significant pressure on them to reduce costs by eliminating redundancy in their process and maintaining a focus on bottom line reporting. BigCol emphasised process and SmallCol emphasised outcome when they described their learning focus about service delivery practice the end point they aspire to be at was very similar. The managers at BigCol showed a preference for process oriented learning about service delivery. Their focus was operationalised for the service managers as a drive to meet student satisfaction goals. In contrast, the managers at SmallCol regarded their organisation as being a “very outcomes driven” organisation that favors taking a what-happened perspective of examining service activity where they operationalise service activity in terms of getting the process, or what they refer to as the “student experience”, correct.

Documentation Mode – Both organisations felt that personal knowledge about service delivery practice was valued strongly. The managers at BigCol preferred to emphasise personal explicit knowledge in order to maintain the documentation of their various operational processes. Similarly, SmallCol has also relied heavily on its personal knowledge stores but it had identified that as an operational and logistical risk that needed managing for the future.

Dissemination Mode – The managers at the two colleges had differing attitudes towards dissemination; BigCol was organised along more formal lines while SmallCol favored less formal means but did still use formal dissemination means. The managers at BigCol showed a preference for formal communications or the use of communities of practice and favored the sharing of knowledge within departmental and organisational boundaries.

Learning Focus – The preferred learning focus amongst the managers at BigCol leaned towards incremental learning. Similarly, SmallCol were also mostly in favor of incremental learning but had a willingness to challenge their norms and embark on a transformative learning exercise if the potential gains warranted the risk. The BigCol managers also recognised that there were silos of expertise in the delivery teams and had strategies to address them. At SmallCol, the managers

had used a double loop learning strategy as a group to challenge established thinking and look at established practices.

Value-Chain focus – Both colleges favoured taking a pre-determined engineered approach to configuring their service delivery systems. At BigCol they acknowledged that their operational reality involved in meeting key delivery dates; so having a clear focus about the time-stage critical nature of their service product was a key driver of how they viewed their value chain. They felt this was the cause of some reactivity in how they viewed their service configuration. At SmallCol, the managers highly valued the team learning that facilitates understanding their target audience. They achieved this by sketching out the broad service objectives in an engineered fashion and then being reactive to changes as they occurred in practice using a delivery centric approach.

Skill development focus – At BigCol the managers felt that skill development occurred at the group level as most service delivery staff work in teams. Some of the skill development is targeted to immediate problem solving and problems requiring complexity are devolved to a business analyst. In contrast, the managers at SmallCol felt that skill development emphasis was more of an individual concern and that team development was something they did not address sufficiently.

7.5.2 Facilitating factors cross case analysis of Dyad 3

Scanning imperative – The managers at the two colleges had slightly differing viewpoints about scanning their respective environment for service delivery related knowledge. They both recognised the importance of environment scanning but differed in their perceived ability to respond to the need. The managers at BigCol felt they were supportive of scanning and were complimentary about the positive way senior managers set objectives and priorities on a whole-of-business basis. While at SmallCol, the managers there felt that it was a more challenging task for them to achieve the service configuration and constraints they worked within. In addition they used informal mechanisms to scan similar competing technical colleges.

Performance Gap – Both groups of managers at the colleges shared similar concerns about what their performance gap was and how best to go about addressing it. The BigCol managers expressed concern that it was challenging at times achieving consensus about what their service gap was made up of and others felt service teams were sometimes made up of some personnel who were less than ideal for the job. While at SmallCol the managers also felt that getting people to agree about what service gap was and whether they could address it was challenging at times and that the operational reality of the college's teaching cycle could inhibit their ability to address the service performance gap.

Concern for Measurement – Both the colleges showed that they were aware of and concerned about measuring the performance gap. At BigCol concern for measurement centered on student enrollment processes which are time and financially critical for the organisation. The main concern was that a lack of integration of services had led to duplicate data entry and service delays. The managers operationalised concern as a desire to communicate with service teams the need to maintain student satisfaction with the enrolment processes. The SmallCol managers were working to address concerns that they had mixed messages about what their service levels should be and how they should be reported to senior management and had an awareness of the need to meet government standards.

Experimental Mindset – Overall, both groups of managers were open to experimentation with strong caveats that they needed management involvement. At BigCol, experimentation in the service teams was not encouraged without specific management endorsement. Innovative behavior was encouraged only if they followed change management processes. Budget and workload strongly influenced the attitude. While at SmallCol, their managers had more of an appetite for experimentation, but they too felt that innovation and trying of new ideas required approval through formal business case and benefits realisation processes.

Climate of Openness – Overall, the managers felt that their organisations were mostly open to debate and the challenging of organisational norms within the bounds of their statutory obligations. At BigCol, some of the managers were

concerned that consultation and communication could fail to evolve into operational priorities but regarded their communications as open and constructive. While the managers at SmallCol asserted that there was a climate of openness overall but they still maintain a top-down managerial style. In addition, for some of the requirement for service teams to comply with government standards left little room for negotiating service standards in some aspects of the business.

Continuous education – BigCol valued continuous education as a part of their organisational purpose that also extended to the service delivery teams. On the other hand, the managers at SmallCol saw education as their product and education for staff as a something completely different. At BigCol the managers valued continuous education of individuals highly but made the distinction however between encouraging continuous education in their service delivery teams and achieving necessary qualification for accreditation purposes. For SmallCol training and capability building was important, but education without a direct link to practice was not favoured or even considered responsible management behaviour for a government agency.

Operational Variety – The managers at BigCol had a mixed approach to valuing plurality in their service delivery teams. On one hand, they were clearly attached to due process but on the other hand they were enthusiastic about variety. They were tolerant of plurality in methods as long as the service experience remained consistent. While they were somewhat tolerant of inconsistency as a consequence of needing to use pragmatic workarounds on a regular basis, they acknowledged that TQM had challenged that thinking. While the managers at SmallCol regarded operational variety in terms of competence and acknowledged the ability of their teams to cope with change in their business processes.

Multiple Advocates – Advocacy and championing of ideas was valued highly by both organisations but with slightly different emphases. Advocacy at BigCol was regarded a formal process for getting recognised by leadership and valued for their contributions. This led in some situations to the concern that some managers would lack motivation to champion new ideas unless they came from within their own teams. At SmallCol, championing was seen as a management task and the managers would decide which ideas merited promotion and championing. They

also noted that advocacy and championing could rely on relationships and status in the organisation.

Involved Leadership – The managers at BigCol felt their leadership was actively engaged with their service delivery system knowledge creation. Whereas at SmallCol it was felt that the leadership should stick to strategy and leave service delivery and operations to the managers. At BigCol the managers asserted that the organisation was on the cusp of a new and exciting phase of its evolution. Whereas, at SmallCol, the managers felt that a lack of communicated strategy for service delivery was a concern and a proposed business administration review was potentially helpful.

Systems Perspective – Systems thinking was not a great priority for either group of managers. This was not due to lack of interest but more because for the managers simply coping with their daily operational reality took precedence over thinking widely and holistically about their organisation. At BigCol they had a desire to think holistically but some felt hampered by the entrenched silo behavior of some staff and others felt that whole systems' thinking was a senior leadership responsibility and that it was their job to look after their component only. While at SmallCol, the managers felt they were not encouraged to take a whole organisational approach as and they had a tendency to rely on informal networks to learn about what their peers were doing.

7.6 Chapter seven summary

In this dyad it has been illustrated that the two education providers are example of the tension that managers face in wanting to build effective organisational learning in teams but the reality of making the best of the situation is often a reality they need to live with.

In the next chapter all six cases are considered together in a cross-dyad analysis to explore what potential conceptual insights might be emerging.

Chapter 8 Conceptual analysis discussion

In the following discussions, the organisational learning framework again provides the frame of reference. In section 8.2 the learning orientations and facilitating factors are used to carry out an analysis that spanned all three dyads to highlight areas of commonality and difference. In section 8.3 the framework is used to look inward and revisit the theoretical foundations of the learning orientations and facilitating factors. This provides a means to reflect on the findings from the cases and to compare them to establish whether the findings were consistent with the theoretical stance proposed in the DiBella and Nevis framework. In section 8.4, the framework is critically examined and changes proposed. Finally, in section 8.5 the framework is recast using the critique from section 8.4 and presented as a candidate model for future examinations of organisational learning within service delivery systems similar to those in the New Zealand PSO setting examined.

8.1 Introduction

In the research method planning stage the three dyad approach was adopted in order to compare organisations in a ‘like with like’ manner. This was done because tertiary education providers, government departments managing public information, and city councils have fundamentally different operational domains. In practice, the research exposed much more commonality than the researcher’s initial assumptions and perceptions suggested. The motives of the managers did indeed vary depending on the problem domain, the politics in each setting was different and the operational culture of each organisation had their individual quirks. But when it came to organisational learning about service delivery systems and turning that learning into a practical set of service delivery systems by managers there was a great deal that the managers had in common.

8.2 Cross-Dyad Organisational Learning meta-analysis.

The initial step in the meta-analysis was to reflect on the learning orientations across the three dyad settings. The dyads approach was used to select and group the PSO organisational contexts along business function lines. The research showed that there was more in common between the diverse groups of managers

than had appeared from the preliminary conversations with executive management. It seems that service delivery managers in the New Zealand public sector experience many similar systems and organisation learning challenges regardless of the actual service function or organisational mission they are delivering to. The following comparison summarises and illustrates the commonality and diversity that was found amongst these managers.

8.2.1 Learning Orientations

The following discussion uses the finding from managers in the research cases to explore how they went about focusing aspects of their organisational learning orientations that built their organisational learning capability.

Knowledge source focus – Across the three dyads there was a largely positive attitude among the managers that encouraged identification and utilisation of knowledge sources from beyond their immediate service delivery context.

For the managers at TrackTech, TechSci and Biggerville internal sources were favoured because their departments and staff were recognised as knowledge domain experts or points of reference in their specialties for the country.

While at Smallerville, BigCol and SmallCol, external voices from sources such as: consultant's advice and recommendations, participation in industry forums, and engagement with peer organisations was a prominent source of inspiration and new knowledge that provided the managers with a common reference point. Additionally, it served to validate their service delivery process thinking.

Some exceptions arose at Smallerville in the way they used their knowledge sources to address a specific operational problem or as part of an cultural norm that defined learning for identifying incremental process improvements; this was dominant in the way they regarded their formal quality management programmes in place such as TQM and Kaizen™. This suggests that focusing of knowledge sources as a tool for specific intervention is a potentially useful strategy.

Product-Process focus – The managers across all six of the cases shared an appreciation of both product and process but varied considerably in where they chose to put their organisational learning emphasis. This depended on the nature

of their service deliverable. For example, at Biggerville where the managers were under external pressure to increase efficiency and reduce operating costs and still maintain existing service performance, the organisational learning focus went towards process improvement.

As well as that, for managers at TrackTech and TechSci there was a desire to direct their team learning towards improving characteristics of the end product. As an example, at TechSci, shifting from a paper-based certification mechanism to an electronic record had a transformative effect on how they configured their service delivery systems and subsequently interacted with their customers.

In addition to these examples, the managers across the board expressed a strong sense of personal obligation to focus their team's organisational learning onto delivering services or to managing the public information assets as a service to the public and for the long term benefit of civil society.

Documentation mode – The managers across all six of the cases expressed a clear understanding and ascribed meaning to the documentation mode part of organisational learning. They did this in both a public and personal sense. Those case organisations also valued knowledge as a collective resource in their service delivery modes. They placed more emphasis on acquiring their learning as a collective resource in the form of public (explicit) knowledge bases and shared a preference for public documentation as their preferred mode.

In addition, at Biggerville and TechSci where individual (tacit) expertise was regarded as important and where there was a clear need for specialist skills or knowledge, the managers put a lot of their emphasis onto the tacit knowledge of key service delivery personnel. Suggesting that effective knowledge management around key people to build capability at the team level as well is a potentially useful future organisational learning strategy. Smallerville managers did this as well and also took the idea further and described their reliance on tacit knowledge as an operational and logistical risk that required careful management.

Dissemination mode – At TrackTech, TechSci, Biggerville and Smallerville, there was a clear preference for the use of formal learning mechanisms for the dissemination of service delivery systems knowledge. This included the

organisational learning that was directed towards facilitating dissemination of service delivery knowledge. Even though the managers had indicated this as a preference, they also regarded informal mechanisms as important for reinforcing and socialising team learning outcomes.

While at the remaining BigCol and SmallCol cases, the managers operationalised knowledge dissemination in a practical sense by building and using systems approaches such as: online repositories, informal networks, communities of practice, and similar socially-grounded mechanisms of learning dissemination. As with the initial four cases, these managers also recognised the formal dissemination mechanisms as being important to their team learning practices.

Learning focus – A preference for focusing on incremental learning formed the dominant discourse amongst the managers in all three dyads. However, they had a variety of reasons for favouring incremental learning over the transformative alternative. At Biggerville, TrackTech and TechSci the managers were particularly sensitive to the risk-averse culture that dominated leadership dialogue about service delivery systems, especially when a substantial investment in information technology was involved. Managing future risk aversion through organisational learning strategies that show how transformative steps in the form of double loop learning could mitigate this tendency.

While at Smallerville and BigCol the organisations expressed a strong commitment to their quality management methodology. As a result of this, continuous improvement practices influenced their thinking so that effective incremental learning was seen as a particular strength.

On top of that, the Biggerville managers felt that taking an incremental view of organisational learning aligned with their need to save money and maintain a low profile – because to those managers, large scale change was synonymous with high cost and high risk projects. They accepted this even if a lack of deep scrutiny meant that their operational systems were sub-optimal as a consequence.

Also, the BigCol managers conceded that in the face of this attitude their sensitivity to risk possibly supported a siloed departmental approach to service

delivery but they were not yet ready to embrace transformational learning to address it.

In contrast, the SmallCol managers were prepared to undertake group learning exercises that favoured transformative learning to challenge established norms and behaviour about how they delivered services, and were willing to explore new delivery models as a result.

Value Chain focus – Across the three dyads the managers consistently viewed their value chain as a pre-determined or engineered approach. In all the cases there was a governing act of parliament or regulations that prescribed their service outcomes. At TrackTech this meant there was little or no leeway in how they could approach the configuration of their service delivery systems. For those managers, compliance with the established standards was the dominating influence. While at TechSci, Biggerville and Smallerville, the value chain focus was operationalised as a set of guiding principles and as long as they operated within the bounds of those principles they had sufficient flexibility to identify where and when they could add value to their services.

At BigCol and SmallCol there were also constraints around the timing of service deliverables that shaped the configuration of their service delivery models. That then influenced how they set priorities and created shared mental models of their service delivery systems obligation. For example, the enrolment cycle at both BigCol and SmallCol created non-negotiable key service delivery deadlines.

Skill development focus – A familiar refrain among the service delivery managers was the idea that an on-going building up of skill in their service teams was an important part of the organisational learning required for service delivery systems planning and development. However, they diverged in the way they chose to describe that value. Managers at TrackTech and BigCol favoured building up skills as a team. While at TechSci, Biggerville and Smallerville, building skills at the individual level was given more credence due to the specialist nature of their service delivery teams.

On top of that, the managers at SmallCol thought that team development was valued as an important aspect of their organisational learning capacity even when it was not explicitly supported by senior management.

The following discussion continues to explore the findings from the managers in the research cases to explore why they focused their organisational learning in the way they did.

8.2.2 *Facilitating Factors*

The next step in the meta-analysis is to examine the facilitating factors across the three dyads. The facilitating factors were originally proposed as the result of a series of critical incident and diagnostic intervention research studies into global corporate organisations (Nevis, et al., 1995). They are well regarded as useful markers of an organisations learning potential. Applying them to the multi-channel service delivery systems context in New Zealand public sector organisations has illustrated that some factors translate better than others. The factors must be kept in context with the learning orientations discussed above and used as boundary markers rather than defining characteristics. Using this approach helps maintain a capability perspective of organisational learning in this setting.

Scanning Imperative – Across all the cases the managers were generally supportive of scanning for new knowledge about service delivery practice. However, their motives and techniques were varied and. At Biggerville and Smallerville, the prime reason that scanning for knowledge was regarded as useful for them was to enable their learning about customer needs and requirements. Whereas at BigCol and SmallCol the focus leaned towards developing professional competency through the use of engagement strategies such as: communities of practice, peer networks, and informal communications structures. While at TrackTech and TechSci, environmental scanning was seen as a management responsibility that involved strategic planning and similar non-operational considerations that were out of scope for the service delivery managers.

Performance Gap – The managers in all six cases acknowledged that there was a performance gap in their service delivery systems that could be addressed through improved team learning. However, there was a variety of interpretations about where the locus of concern for that gap should be situated. At TrackTech and SmallCol, the performance gap was regarded as a concern that operational managers should own. The managers also incorporated meeting customer expectations and responding to the pressure of political accountability into their views of performance and what they felt represented optimal performance. While at Biggerville, Smallerville and BigCol a shared understanding of the performance gap and the operational strategy for addressing it was seen as the essential factor. The performance gap was also interpreted by them in terms of in-service training and coordination activities for service delivery team management.

TechSci had an additional interpretation that the performance gap was a reality that arose as a consequence of operational peak demand. That meant the organisation could not afford to deliver optimum service performance because the service levels paid for do not support optimal service levels. Simply put, it would be too expensive to do that. From an information systems perspective this is a typical queuing theory problem. TechSci coped with this by using satisficing strategies.

Concern for Measurement – An interesting tension emerged across all the dyads when it came to discussing the managers concern for measurement. The management measures for service delivery performance were established for reporting service performance in the form of statistical or key performance indicators. As well as those measures, the managers also maintained ‘soft’ or perceived measures that they used for their team learning to internally assess whether their service teams performance was acceptable. This was a contradiction of Argyris’s (1996) defensive routines behaviour, in that the managers were self-critical and held their personal and team expectations to a higher standard than the leadership expectations.

This was displayed at Smallerville, Biggerville and TrackTech where the managers expressed concern that the performance metrics and quantifiable

reporting mechanisms were in place for their service delivery in order to meet statutory, legal, quality systems, and managerial obligations. They felt that those measures did not always tell the whole story about how their customers and service agents co-produced service value.

At TrackTech the emphasis was on what they describe as the “widget production” volume where they are judged on how many information product units they deliver. That metric shaped their overall concern for measurement. At Biggerville, setting the quantitative goals for service teams that were expected to manage community relationship issues was viewed by the managers as being counter-productive.

At TechSci, particular emphasis was put on understanding the end user intent and was seen as an important means for delivering user satisfaction. The managers there also felt that performance measures needed to be managed while still meeting the needs of the wider ‘customer’ in the form of the stake-holding Minister of the Crown.

On top of that, in settings such as at Smallerville, quality management programmes helped managers define and shape their thinking about team commitment and value for customers as a set of key metrics. For those managers the performance metrics were what they described as a ‘good fit’ test for understanding customer expectations.

Experimental Mind-set – Across all three of the dyads an experimental mind-set amongst service delivery staff was generally endorsed by the managers. However, several interesting patterns emerged. Firstly, at SmallCol the experimental mind-set was interpreted by the managers as being synonymous with innovation. Secondly, experimentation or innovation was something that required specific senior management support and endorsement in order to proceed. At Biggerville and Smallerville the managers preferred to take a risk management view of the experimental mind-set. They felt that risks needed to be identified prior to experimentation and a mitigation strategy agreed and ‘signed off’ before experimentation could occur.

At TrackTech and TechSci, experimentation was regarded as acceptable as long as a suitable management level sponsor had been recruited. The downside was obtaining that senior management endorsement for experimentation involved process and formality that some of the managers regarded as ponderous and had the effect of stifling an experimentation culture.

Even at BigCol, who had the most liberal attitude towards experimentation, the managers maintained the need to ensure it followed a formal business case and benefits realisation processes.

Climate of Openness –The notion of a climate of openness was largely supported across the dyads, albeit conditionally for some of the managers. For example, at SmallCol the managers were sensitive to the organisational protectiveness that surrounded service delivery expectations and the need for compliance with corporate standards.

This was illustrated by the way some of the managers at TrackTech and Biggerville were open to debate but acknowledged their organisational culture as being strongly risk averse and protective of political and public reputation.

In addition, the managers at Biggerville encouraged service delivery teams to appreciate the guiding principles they operate under and the rules they needed to comply with to maintain service accreditation. At Biggerville and BigCol, the ideas could originate anywhere in the organisational hierarchy but required specific acknowledgement and support at a leadership level to proceed to action.

As well as that, managers at Smallerville and TechSci expressed concern that the leadership consultation processes that sought input organisation wide was a noble effort but suffered from lack of follow through by the organisational leadership.

Continuous Education - Of all the facilitating factors, continuous education was the one that the managers across all the dyads had the least interest in engaging with. Even though the managers cared deeply about the overall capability of their teams, they felt that continuous education was a personal preference decision for their service team members and they had little need or desire to be involved in continuous education of staff if it did not have a job performance outcome.

For the managers at Biggerville and TechSci that had thought about it, they operationalised continuous education as professional development and interpreted it within narrow bounds. At TrackTech and SmallCol it was regarded as a knowledge transfer issue used for developing incumbent team skills in changing environments, or, as on-the-job training for new employees. Smallerville narrowed the scope even more, limiting their interpretation to just the necessary skills to meet the requirements of on-going quality systems accreditation compliance.

At BigCol, where the organisation's core business was adult education, the managers were a little more engaged, but still not overly enthusiastic. They supported the idea of the organisation creating educational opportunities for service delivery team members but did not follow it through with it by having an active continuous education programme or make any special effort to be an advocate for it.

Operational Variety – There was no clear favourite when it came to interpreting operational variety across the three dyads. For most managers, the idea of variety in their service delivery teams cut across their aspirations and world views of their professional responsibility to build consistent, highly repeatable service products.

At TrackTech and TechSci the feelings of the managers were demonstrably absolutist when it came to allowing variation and change in their service delivery context. At Biggerville, Smallerville, BigCol and SmallCol, the manager's attitudes were more accommodating but the managers were not enthusiastic about the idea of plurality in their service delivery methods.

Biggerville had an atypical example of when plurality was regarded as strength. This was in the delivery of community relationship services. In that situation, the service agents had a 'social work' dimension to their role that required them to display personal attributes such as: empathy, flexibility, and compassion on behalf of the organisation.

Another example came from Smallerville, where consistency and repeatability were core values for TQM accreditation compliance. At the same time, however,

the managers understood the need for their service agents to add value and work with the community to co-produce their service value.

These managers were actively motivated to try and find a balance between the absolutist expectations of TQM and the benefits that plurality could bring to team learning. At Biggerville and Smallerville a pattern emerged where, as the managers of a systems accredited institution, they experienced a tension where they wanted to be pluralist in order to flexibly meet the changing needs of their customers and policy makers but also needed to be absolutist in following due process for running the core business such as compliance with the Building act.

Multiple Advocates –Across all the managers of the six case organisations there was commonality in their descriptions of the experimental mind-set factor and the way they regarded multiple advocacy. The feelings expressed about both factors were similar. There was overall support for the idea of advocacy being valued. However, it always came with the caveat that advocacy needed to maintain an alignment with the organisational hierarchy and needed to follow a defined process and fit into a budget.

There was little scope for the service delivery teams to deviate from that pattern. It was recognised and acknowledged that the boundaries between departments could inhibit the flow of new ideas and advocacy. For example managers at TechSci expressed concerns that this sort of thinking about service delivery systems innovation had led to ideas staying within the service delivery teams rather than propagating more widely.

Involved Leadership – Managers described their senior leadership as variously actively engaged through to completely uninterested and many points in-between.

At BigCol and TrackTech the managers viewed their leadership as caring and informed but largely disinterested in service delivery systems operations and details. Those managers felt this was a reasonable stance and that their leadership should confine itself to setting expectations and strategy.

While at TechSci and Smallerville, the managers felt that their CEO's were actively engaged and were willing to become involved in service delivery systems

learning. They felt that their leadership was prepared to take the time required to understand the service delivery models and systems that formed their service delivery strategy and take an active role in the definition and learning that went into it.

In contrast, at Biggerville and SmallCol, the managers regarded their leadership as uninterested in issues of service delivery systems and felt that they were concerned that their attentions be directed towards cost containment and only cared about service outcomes from a summary perspective as reported by the key metrics.

Systems Perspective – Across all six cases the managers had quite different attitudes and feelings towards the systems perspective and systems thinking. For managers at TrackTech and Smallerville there was an almost religious attachment to systems thinking. At TrackTech, systems thinking was a CEO sponsored methodology that was actively encouraged. In contrast, at TechSci and Biggerville, the managers felt that coordination between departments needed improvement and, even though a systems thinking approach was a familiar concept, the opportunity to apply it beyond the boundaries of their individual departments was limited because of their organisational configuration.

At SmallCol and BigCol systems thinking was not a compelling priority for the service delivery managers, for them the daily routine of fulfilling departmental goals and priorities took precedence. Instead, they felt that systems' thinking was something best left as a leadership or specialist business unit responsibility.

8.2.3 Additional aspects that did not fit with the DiBella and Nevis framework

Several aspects of PSO multichannel organisations emerged during the interviews that did not fit within the DiBella and Nevis organisational learning framework.

8.2.3.1 The public sector customer

In the research the public sector customer emerged as a complex construct for the service exchange. A public sector customer in this study was a person who was the recipient of an information product as a result of a dialogic interaction with a service delivery agent in which the customs and norms of the service encounter

are pre-established by the channel chosen. That information product may or may not have been accompanied by a physical product, a financial exchange or an on-going service action. However, the customer is not necessarily the beneficiary of the service exchange as would be expected in a traditional commercial exchange.

For public service organisations delivering services in multi-channel setting the notion of who the customer is can be harder to define. The situation becomes more complex when the services need to be delivered on behalf of the Crown to individuals or constituencies in order to accrue benefits for the public good but not always to the immediate or of particular benefit of the service recipient. For example, a customer being detained by the coercive powers of the police service, or a customer of the taxation system receiving a demand for money has different rights and expectations than a tourist booking a holiday in a national park. Considering this conundrum, there appears to be three key types of public sector customer: the compulsory customer, the voluntary customer and the owner-customer.

The compulsory customer situation arises when the customer is subjected to the laws of the state. In that setting, the interaction can take on a number of patterns; the customer may be seeking the protection of the law as in the situation of a civil emergency, or they may have been arrested by the police, or they may be subjected to legitimate demands from the state as in the situation of a tax demand, or they may be formally challenging the state's actions as in the case of filing a court action. In all these scenarios, even when there is a clear tipping of the balance of power in the favour of the state, there are still enduring themes of a customer service culture in terms of principles of respect, an expectation of the transfer of information in a relevant and efficient manner, and a clarity of process that still applies even when the customer is a less-than-willing recipient of the services. This situation was apparent within the two city council situations where the local authorities had responsibility to enforce rules and by-laws where the recipients of the service were not always happy to receive the service.

The second customer type is the voluntary customer who is engaging by choice in order to procure goods and services from a Crown owned or controlled agency or business. The state customer in this setting while akin to the more traditional

commercial willing seller-willing buyer relationship often does not enjoy quite the same degree of buyer power because there is frequently reduced or no choice but to buy from the state or not buy at all. For example, in the council setting again, a house-holder wishing to obtain a Land Information Memorandum (LIM) for their property has no alternative but to purchase one from their local government authority through the service interface of that authority. This is not quite a monopoly situation because often the authority concerned are required agents and are not able to charge what they like but in other situations monopoly type behaviour or the opportunity for it exists.

The third customer type is the customer as a stakeholder of the Crown in this setting the customer is exercising their constitutional right to access governance information from the state. In this setting the customer wants to gain access to the informational products of government agencies in order to monitor and comment on their activities. This was the case at TechSci and TrackTech where an expectation of transparency influenced their ability to configure services.

The implication of this typology is that state sector organisations do not necessarily have a clear view in every customer encounter situation of which mixture of customer types that they may be dealing with. It is entirely possible that all three situations can occur in a single customer conversation. For example, a customer can engage with a city council service desk to: (a) challenge a parking fine, (b) buy a ticket to an art gallery show and (c) obtain a copy of the council's district plan.

8.2.3.2 Information stewardship

The New Zealand public sector maintains and manages multiple data sets on behalf of its citizens these include but are not limited to:

- Health records that represent epidemiological, mortality and morbidity, adverse vaccination registries, and other similar public health registers.
- Land transfer and title documentation that underpin property rights and facilitate ownership and land usage but go beyond the fiscal

responsibility to preserve data about claims by groups seeking pre-colonisation redress.

- Passport and customs information that encompasses citizenship and identity.
- Civil registries (hatch, match and dispatch)
- Geographic and hydro-graphic data sets that describe the shape and boundaries of the nation.
- Natural resources and conservation data
- Educational records

Many of these repositories have long information life spans span multiple SDLC iterations and have out lived different retrieval and storage technologies. Technologies change but the need for someone to care about the data becomes a duty for public officials.

In the past, registries and public data was a process that involved a physical registry. Today that same data may be recorded in multiple electronic repositories each with different purposes and associated policies bringing with it all the usual issues around information redundancy. Data collected in repositories today is frequently collected with little or no understanding of what future uses they will be applied to.

Some of the issues arising include:

- Collection and maintenance of information for completeness rather than for immediate value. Public agencies are often responsible for maintaining complete data meet international treaty obligations, or for reasons of credibility as a sovereign nation. For example national geographic data – we routinely create maps for places where no one goes.

8.2.3.3 An example of mandated stewardship:

The General Manager at TrackTech here is given that title in this research for the purpose of obfuscation – the actual job title would identify the organisation and individual:

“Our [general managers] are legally accountable if something happens because of the way that the legislation is. It’s their statutory obligation to make a decision so they may be out there trying to figure out what’s going on rather than just dealing with the budgets and the high level stuff that the senior managers do.” – EBM at TrackTech.

8.2.3.4 Privacy and security concerns around putting sovereign data online.

An aspect of information stewardship that emerged was privacy and security issues of putting sovereign data online. In the relatively short time since these public officials expressed some nascent concern cloud services have risen to prominence and this issue is topical. The concern was characterised by:

- **Information sovereignty** – public officials care about where public information physically resides.
- New Zealand enjoys a **low corruption** public service with a strong public service ethic and sense of duty.
- Public officials largely enjoy **independence from overt political direction** (but are not immune from political influence).
- **Open access to public data** based on need addresses information equity issues between citizens and the state. Raises questions about how transparent or otherwise public information should be.

8.2.3.5 Defensive behaviour around potential for failure:

Defensive routines by managers did not necessarily give way easily. The managers acknowledge that they are still prone to being cautious in keeping with the New Zealand public service culture of risk aversion:

“If there are problems, we are reasonably open but sometimes it gets down to individuals – some think it better to suppress and pretend it did not happen. If you had a project at the time when a lot of “think big” government projects were going wrong. You had the INCIS project which was not successful and other big IT projects falling over. Here comes along another department with a \$140m project. The chief executive at the time did a tremendous job but failure was not in his

vocabulary - he was very staunch. That built a culture of – not quite of fear, but a “no matter what – get the job done” attitude, a culture of “keep it under the radar” because it might be detrimental; quietly fix it up. If things were not going quite right, you would make it happen, rather than being open about it. We have moved away from that now, we are a more open organisation now.” – TSM at TechSci.

The managers commented that this ‘staunch’ culture created a pattern of wanting to maintain the appearance of everything going smoothly even if service performance was not operating optimally in practice:

8.2.4 Table 4 - Summary of findings

Learning Orientations						
	TrackTech	TechSci	Biggerville	Smallerville	BigCol	SmallCol
Knowledge sources (internal – external)	<u>Internal</u> – sole specialists in NZ.	<u>Internal</u> – knowledge domain experts for NZ.	<u>Internal</u> – Experts in their community.	<u>Internal</u> , but focused on quality criteria.	Mainly <u>External</u> – especially advice from consultants. Some internal from experts.	Favoured <u>External</u> – advice from industry forums, consultants valued over internal voices.
Product/process (what or how)	<u>Product</u> – for output efficiency and information stewardship.	<u>Product</u> – for output efficiency and information stewardship.	<u>Product</u> – to aggressively reduce costs.	<u>Process</u> – focus on quality aspects and make efficiency gains with contractors.	<u>Process</u> – for efficiency gains.	<u>Process</u> – for effective service outcomes.
Documentation mode (personal or public)	<u>Public</u> – with a procedural documentation emphasis.	<u>Public</u> – focused on codified explicit knowledge.	<u>Personal</u> – reliance on trusted key individuals.	<u>Public</u> – to support accreditation.	<u>Personal</u> – supports explicit skills that support the team indirectly.	<u>Personal</u> – with an awareness of need to broaden focus.
Dissemination mode (formal or informal)	<u>Formal</u> – directed learning aligned with organisational goals.	<u>Formal</u> – directed learning endorsed by leadership.	<u>Formal</u> – via building and recognising individual expertise.	<u>Formal</u> – via repository of formal standards and explicit knowledge repositories.	<u>Formal</u> – preferred communities of practice and endorsement by leadership.	<u>Semi-Formal</u> – used formal language but also relied on personal networks and relationships.

Learning focus (incremental or transformative)	<u>Incremental</u> – risk aversion promotes single loop learning.	<u>Incremental</u> – understanding what needs to be achieved for success and achieve that through step by step learning.	<u>Incremental</u> – as a means of avoiding the risks associated with transformation.	<u>Incremental</u> – through endorsement of continuous improvement cycles.	<u>Incremental</u> – but saw the need to breakdown silos with transformative approaches.	<u>Transformative</u> – had a culture of using double-loop learning to attempt innovation in practices.
Value-chain focus (Engineering or Marketing)	<u>Engineering</u> – driven by governing law; solution focussed.	<u>Engineering</u> – driven by governing law; solution focussed.	<u>Engineering</u> – desire to meet compliance expectations.	<u>Engineering</u> – desire to add value to service exchange.	<u>Engineering</u> – focus on time driven deliverables meant highly systematized processes.	<u>Engineering</u> – focus on end deliverable and the means to get there through efficient processes.
Skill development focus (individual or group)	<u>Group</u> – mainly at the team level.	<u>Individual</u> – within the context of their operational team.	<u>Individual</u> – focused on rewarding individuals even though rhetoric used team building.	<u>Individual</u> – in concert with building the team but endorsed individuals.	<u>Group</u> – team capability valued more than individuals.	<u>Individual</u> – built up individual skills and team would hopefully benefit.
Facilitating Factors						
	TrackTech	TechSci	Biggerville	Smallerville	BigCol	SmallCol
Scanning imperative	<u>Valued</u> – as an external responsibility.	<u>Valued</u> – as a means of engaging with professional	<u>Valued</u> – used to inform new initiatives and channels plus	<u>Valued</u> – by building a community with contractors and	<u>Valued</u> – as a means of informing management	<u>Valued</u> – as a competitive analysis technique more than a

		communities.	professional relationships.	supporting agencies	determined objectives.	learning tool.
Performance gap	<u>Aware</u> – as key performance metrics.	<u>Aware</u> – as customer satisfaction and metrics.	<u>Aware</u> – seen more as a team dynamics, accounting, measurement and training issue.	<u>Aware</u> – acknowledged reality used continuous improvement and satisficing strategies.	<u>Aware</u> – but hard at times to develop consensus around what the gap is.	<u>Aware</u> – service delivery silos could inhibit how agreement about the gap was built.
Concern for measurement	<u>Concerned</u> – about how measures are defined.	<u>Concerned</u> – that measures once defined are/are not representative of customer expectations.	<u>Concerned</u> – represented as a measurement issue.	<u>Concerned</u> – represented as a total quality issue.	<u>Concerned</u> – seen as a process management issue.	<u>Concerned</u> – seen as a management communications and compliance issue.
Experimental mind-set	<u>Endorsed</u> – with management sanction caveat. Some tolerance for failure	<u>Endorsed</u> - with management sanction caveat. Neutral tolerance for failure	<u>Endorsed</u> - with management sanction caveat. Fear of failure.	<u>Endorsed</u> - with management sanction caveat. Tolerance for failure.	<u>Not encouraged</u> – processes are only changed with due process.	<u>Endorsed</u> – with conditions around formal endorsement.
Climate of openness	<u>Supported</u> – contingent on public accountability (and the attendant risk aversion).	<u>Supported</u> - contingent on public accountability (and the attendant risk aversion).	<u>Supported</u> – contingent on meeting expectations of accreditation processes.	<u>Supported</u> – contingent on management and transparency expectations being met.	<u>Supported</u> – contingent on statutory obligations.	<u>Supported</u> – within the endemic top-down management style.
Continuous	<u>Unsupported</u> –	<u>Unsupported</u> –	<u>Unsupported</u> –	<u>Unsupported</u> –	<u>Not practiced</u> –	<u>Unsupported</u> –

education	supported if recast as on the job training.	supported if recast as professional development and accreditation.	supported if recast as vocational training and skills training.	supported if recast as vocational training and knowledge transfer by key employees.	although supported in-principle.	supported if recast as vocational training and skills training.
Operational variety	<u>Unsupported</u> – mainly formal standards driven.	<u>Unsupported</u> – consensus and best practice driven but once agreed becomes the standard.	<u>Supported</u> – provisionally in accreditation centred activities but necessary in others such as community development.	<u>Supported</u> – tolerance for variety as long as it aligned with their quality consistency aims.	<u>Tolerant</u> – as long as service consistency is maintained.	<u>Supported</u> – operationalised as teams flexibility in problem solving.
Multiple advocates	<u>Champions</u> - are recognised and supported with management endorsement.	<u>Champions</u> - are recognised and supported with management endorsement.	<u>Champions</u> - are recognised and supported but limited by silos in the organisation.	<u>Champions</u> - championing is seen as a whole of management issue.	<u>Champions</u> – supported if endorsed by management.	<u>Champions</u> – are supported if they are managers.
Involved leadership	<u>Not active</u> – occasional visits.	<u>Active</u> – partially; involved in setting high level vision but not engaged in training programmes or detail.	<u>Uninvolved</u> – leadership of service learning not viewed as a CE or director level issue.	<u>Active</u> – CE actively involved in service definition and learning.	<u>Active</u> – regular engaged involvement from leadership.	<u>Not active</u> – lack of communicated strategy left service teams guessing beyond basic compliance with regulations.
Systems	<u>Engaged</u> - used as a problem solving	<u>Partial</u> – Awareness but	<u>Partial</u> – Have a desire to deal with	<u>Engaged</u> – mostly open to systems	<u>Not Engaged</u> – managers did not	<u>Not Engaged</u> – informal networks

perspective	and integration framework.	gets subordinated to delivery focused actions.	issues holistically but not a shared value.	thinking but not a shared value across the organisation.	perceived any desire to breakdown existing silos.	and function specific initiatives seen as a higher priority.
The public Sector Customer	<u>Strong influence</u> – seen as a core competence	<u>Partial</u> – in some parts of the organisation there was a ‘we know best’ attitude.	<u>Strong Influence</u> – but offset by cost savings messages.	<u>Strong influence</u> – seen as a core competence	<u>Moderate influence</u> – offset somewhat by processes-led thinking.	<u>Strong influence</u> – seen as a core competence
Information Stewardship	<u>Strong influence</u> – seen as a duty	<u>Strong influence</u> – seen as a duty	<u>Moderate influence</u> – seen as a compliance cost.	<u>Moderate influence</u> – seen as a compliance cost	<u>Not overly important</u>	<u>Not overly important</u>
Defensive behaviour re: Failure	<u>Strong</u> – very conscious of public spotlight around ICT failure.	<u>Strong</u> – very conscious of public spotlight around ICT failure.	<u>Strong</u> – very conscious of public spotlight around ICT failure.	<u>Moderate</u> - CEO with some awareness of risk.	<u>Moderate</u> - CEO with some awareness of risk.	<u>Not overly important</u>

8.2.5 *Cross dyad analysis section summary*

This concludes the discussion of the cross case analysis. It has shown that the managers in the cases have a lot in common as well as some areas where there is substantial diversity in how and why they use organisational learning in the way they do.

In the following section the discussion continues by taking these ideas and linking them back to the core theory of organisational learning that made up the integrated capability perspective.

8.3 Developing theory from the findings

This section reflects on the aspects of organisational learning that the theoretical lens introduced in chapter two suggested might occur within learning organisations and examines if those orientations and facilitating factors aligned with the empirical findings of this study.

The findings of this research were a series of rich narratives that represented many differing views of the managers of the multi-channel service delivery systems information systems phenomenon in a particular organisational context: the New Zealand public sector.

Across all the cases the managers showed a commitment and desire to use organisational learning practices to improve their service delivery team's performance. Even though they did not express those ideals using consistent or easily recognised labels for the mechanisms of that learning, they did display considerable variety in using the concepts of organisational learning as a capability building mechanism. The remainder of this section and the sections that follow explore the differences and similarities to the lens and propose a series of adjustments on the basis of the findings.

8.3.1 *Learning orientations*

In the literature review it was identified that the learning orientations dimensions of the integrated capability framework were aimed at exploring how organisations learn. The following discussion links the body of theory behind the orientations to the findings from the cases. In addition, this discussion reflects on the

usefulness of the dimensions in the context of this research and more specifically the New Zealand PSO service management context.

Knowledge source focus – Theorists such as Bolton (1993) and DiBella (1998) suggested that organisations would either value internally developed knowledge in order to invest in a “*research learning curve*” (ibid p.43) – or, on the other hand, invest in environmental scanning to learn how to engage with their market (Ballantyne & Varey, 2006). In the research, the service delivery managers regarded both approaches as valid in their organisations. To meet those priorities requires a mixed learning strategy for configuring the systems they operate. As an example, in the TrackTech and TechSci cases, there was a clear internal focus because in that setting the managers were the knowledge experts in their professional domains.

For these managers, acquiring, processing and taking action on new knowledge sources was a clear priority. DiBella and Nevis (1998) suggested that from their research into large commercial market-oriented organisations a clear tendency one way or the other would be apparent.

The managers in the cases of this research disputed that suggestion in the PSO service delivery setting. In a commercial setting, an organisation may choose to become a low cost provider of ‘me-too’ product and adopt a learning focus that strongly favors external scanning (Porter, 2001). However, the respondents indicated that for the public sector service delivery setting the model is a hybrid approach and much less clear than traditional value theory would suggest. So, the need to adopt a knowledge focus that is also widely focused would seem sensible.

The managers in the public setting were inconsistent in how they viewed knowledge sources when faced with complex systems and domains compared to their counterparts in non-public sector settings. Commercial managers can be clearer because they can direct their learning onto commercially relevant outcomes within clearly definable boundaries.

According to existing literature, PSO managers in a service delivery setting who want to improve their organisational learning capability have to maintain a broad focus on knowledge sources from both internal and external sources. The

managers in the research were consistently comfortable with this orientation and even though they displayed clear preferences about which learning focus they used, they did not consistently prefer one style over the other. Overall, these PSO managers had a strong sense of using knowledge sources to develop their multichannel service delivery capability.

Across the three dyads, the managers appreciated the need to build and sustain knowledge sources. However, cultural tensions emerged when the managers tried to change the emphasis of this orientation. Because it was easy for the culture of some of the organisations to over-emphasise internal knowledge and they viewed themselves as the ‘established experts’ in their field so no outside sources were readily available that they felt they could trust. This created a barrier to new knowledge coming from external sources.

In other settings, external validation through accreditation processes was a strong voice in the knowledge sourcing conversation leading to a ‘not invented here’ impression for some of the managers who did not feel knowledge sources and ideas would be valued over external ones.

This suggests that the knowledge sources orientation is indeed a helpful construct to take forward in the discussion of organisational learning in the PSO service delivery context.

Product-Process focus – Organisational learning theory asserts that learning happens through awareness of deliverables, core capabilities and processes and that there is also a tendency to focus on either product or process (Hamel & Prahalad, 2010). Prior research suggests that generally organisations are not good at focusing their learning onto both aspects (DiBella & Nevis, 1998).

The managers in the research tended to support this idea. Although there were organisational settings in the research where process was the primary consideration and other settings where the focus was on product.

However, for many of the managers it was a matter of degree where they chose to put their team learning emphasis. The presence of service quality programmes such as the Baldrige™ criteria at Smallerville, TQM at Biggerville and Kaizen™

at BigCol illustrated a strong awareness and regard for process, that linked their learning efforts to those commitments.

The public service managers' learning actions in designing, configuring and operating service delivery systems displayed a clear and balanced product-process focus. At a case level, the managers tended to favour either product or process, never in-between. At the dyad and cross dyad levels there was still a tendency to favour one orientation at the expense of the other.

In addition, many of the managers had in-common a 'meta-driver' in the form of their strong public service ethic and information stewardship concerns. These career-oriented public sector managers saw their role as agents of the public delivering consistent, high quality services, in the best interests of the Crown, as an end in itself.

Configuring the process and product to achieve this meta-outcome, for managers such as at TechSci, TrackTech and Smallerville, the public service ethic transcended the actual service exchange dynamic responsibility to meet the day-to-day end-use customers' needs.

According to Armistead and Kiely (2003) one of the defining aspects of any service delivery organisational culture is whether the organisation adds its service value by primarily delivering an information product or whether the added value resides in the processes that manipulate the information.

In summary this research found that there was considerable variety in how the managers viewed their contribution to the service learning culture. However, what they did consistently agree on was the need for service delivery systems learning to equally value both aspects in the interests of delivering both a satisfactory service to the service recipient.

At the same time, the managers valued looking after the information quality interests of the organisation. This sense of obligation to deliver a quality product and processes underpinned many of the conversations in the research.

As a result, the Product-Process construct is helpful overall, but in the modified framework are adjusted to ‘Service’ and ‘Process’ in order to better represent how the managers think about their service outcomes.

Documentation mode – Existing theory suggests that learning organisations will have a preference for individual (tacit) knowledge or socialised and recorded (explicit) knowledge of the group on the other (DiBella & Nevis, 1998; Nonaka, et al., 2000).

In the research cases the need to learn about where and why service delivery systems knowledge existed and the need to manage the risks associated with both extremes was generally well understood by the managers. Indeed, the full spectrum of attitudes towards the documentation mode was shown across the three dyads. For some groups of managers, such as those at TechSci, the tacit skill bases and experience of a few key individuals was regarded as particularly important.

For some of the operations-oriented managers, such as those at TrackTech, where their team member were thought of as interchangeable the required knowledge and skills were regarded as attributes of the organisational operating systems. That was the most important dimension for them and not the skills attributable to the individual because they were oriented towards building team capability rather than developing individuals as experts.

The attitudes of the managers in the research were inconsistent with DiBella et al’s (DiBella & Nevis, 1998) theoretical assertion that there would be a clear preference about the documentation mode. The managers did not seem to be greatly influenced by the personal or public documentation styles. There was an eclectic mixture of stylistic preferences that was done for pragmatic reasons where the managers would “cherry pick” knowledge management approaches that suited their particular situation.

The orientation was useful for illustrating the inherent complexity of the case organisations but was a challenging concept for some of the managers to make work.

Dissemination mode – The dissemination mode examines the formality of the means of propagating learning in the organisation. Existing organisational learning theory suggests that organisational learning requires a degree of both formal and informal styles and that in a healthy learning organisation both styles will be clear even though they will probably have a preferred style (DiBella & Nevis, 1998). This can be manifested through the organisational policies, rules and politics that define the operational reality of the organisation (Fischer, 2000). This is consistent with a community of practice culture (Wenger, 2000).

In all three dyads the formal mechanisms shaped the dominant discourse about knowledge dissemination but not to the exclusion of the informal learning mechanisms. The managers generally indicated that there was a place in their organisational learning practice for informal networks, water cooler conversations, and knowledge ‘gurus’. These then became the key people who acted as a “go to person” for specific knowledge about how the service delivery systems worked.

At TechSci, an online repository provided a means of disseminating service knowledge in a consistent and formal manner. While at Biggerville, communities of practice were endorsed and sanctioned as a means of supporting informal dissemination of knowledge about service practice.

Knowledge dissemination was valued by the managers. However, there was an over-emphasis on formal approaches to learning opportunity development. Less formal organisational learning opportunities such as communities of practice, mentoring, tacit knowledge transfer by shadowing and similar practices were being lost to these managers.

Organisational learning theory suggested that for effective organisational learning to occur is necessary to accommodate differences in learning styles (Senge, 2004). TechSci and Biggerville navigated this by acknowledging their informal networks and communities of practice but at the same time providing a means for accommodating formally sanctioned initiatives. However, in other settings, such as at TrackTech, the potential opportunities for learning through less formal means were abandoned as too risky.

Overall, for the service delivery managers in this research, attitudes and practices for the dissemination mode were consistent with what organisational learning theory suggested would be the case in that multiple styles were accommodated. There was a mixed approach to dissemination that favoured both the formal and the informal but not one at the expense of the other.

The dissemination mode orientation was indeed a construct the managers readily related to and that the formal to informal continuum was a helpful means of representing this orientation.

Learning focus – The theory behind this orientation considered how organisations focused their learning efforts. It considers whether learning is focused at existing efforts (single loop learning) or whether it requires new thinking (double loop) (Argyris, 1994). DiBella & Nevis (1998) suggested that that single-loop incrementalism is necessary to refine and reinforce learning while double-loop transformativism is necessary to respond to fundamental change in an organisation's operating environment. They suggested that effective organisation learning requires a balance of both learning styles.

For many of the managers, transformative learning represented an overt risk, and risk aversion was the dominant discourse in their business context and in the messages from their leadership.

The managers across the board showed a clear preference for an incrementalist learning focus. This was inconsistent with what theory suggested should be going on in organisations with a well-supported organisational learning culture. A reluctance to engage with transformative learning in these groups was illustrated by their risk averse culture and a desire not to 'rock the boat' in a pervasive climate of employment uncertainty, restructuring and pressure to constrain costs in the New Zealand public sector at the time of the research interviews.

In addition, that climate and refactoring of operational priorities also illustrated less transformative learning preference even though theory (ibid) suggested that change within the operating environment would be an opportunity for transformative learning. For example, at Biggerville, at the service manager level, the uncertain employment culture created a siege mentality where the

managers only focused on small incremental changes so that they did not draw unwelcome attention to themselves or their operational teams.

Overall, the learning focus in the PSO service delivery setting favoured an incremental approach in preference to a transformative one. The managers had a problem with organisational learning strategies that embraced double loop or transformative learning.

Maintaining the status quo was a powerful magnet for these managers and that conservative appetite for change saw them lean much more toward an incremental learning focus.

As a result, the strong preference for making only incremental improvements inhibited possible organisational learning opportunities by the managers not feeling empowered to routinely challenge and encourage deep thinking about the fundamental premises of why and how services were delivered among themselves or their service delivery teams.

For example, at TrackTech the managers delegated their organisation's service delivery systems learning responsibility to senior managers or to other business functions such as a strategy unit.

In summary, the managers in this research showed a preference for incrementalist learning in their service delivery practice the orientation itself provided to be a useful means for understanding why this polarization was happening.

Value Chain focus – The theory underpinning the value chain focus orientation stems from the assumption that organisations seek to add value to their value chain and that there are strategies for adding value that lean towards engineered or marketed products (Armistead & Clark, 1993; DiBella & Nevis, 1998; Porter, 1980 2001). In addition, managers may decide to 'invest' or 'de-invest' in parts of their value chain depending on the learning challenges that that part of their value chain represents (Prahalad & Hamel, 1990).

The managers across all six cases regarded their value chain as oriented towards being pre-engineered. In two of the cases services were engineered in the form of a strict prescription according to their governing legislation.

In the case of TrackTech, legislation could be changed by political initiative but the change cycle involved could take six to ten years to effect change so the organisation accepted their delivery context as effectively fixed.

At Biggerville and Smallerville, managers operationalised their controlling legislation through interpretation of regulations and by-laws. They regarded their engineered value chain as a means for adding value and used their value chain understanding to establish the scope of how they delivered services.

While at TechSci, BigCol and SmallCol, the value chain was used to help form shared mental models of service operations and although there was a governing act they were not influenced by it in a daily service delivery sense as the other case organisations were.

The public service managers in the research understood their value chain and value propositions. They found it was a useful mechanism for developing shared mental models of their service delivery systems. It also provided a helpful framework for seeking value added opportunities and for developing an understanding of the scope and operationalising service expectations.

Identifying which core competencies should be the focus of learning investment is at the heart of the value chain learning focus. For most of the managers in the research the orientation was towards the pre-engineered end of the continuum. Prahalad (1990) suggests that it was not practical for commercial entities to focus on the entire value chain and this was also consistent with the PSO service managers' attitudes.

On top of that, an interesting variant was shown in the way that the manager's at Smallerville also interpreted their contractors' value propositions as an important part of their own learning landscape. This suggests that a single value chain view was and that multiple, intersecting, value chains should also be considered as a learning influence in service delivery systems.

The managers viewed their governing legislation as an engineering specification. The other learning dimension that shaped organisational learning in this setting was the way managers appreciated the complexity of overlapping systems in their

service delivery (Senge, 2006). This was illustrated well by the way Smallerville involved its service contractors in its organisational learning activities.

This focus gave structure and form to the organisational learning for many of the managers but it could also restrict opportunities for innovative learning. By having a strong swing towards the pre-engineering and compliance end of the continuum limited chances for promoting and supporting organisational learning in terms of encouraging managers to try out innovations and new thinking. However, for other managers it provided an unambiguous framework that they used to build new service delivery knowledge.

Overall, the value chain aspect in organisational learning for service delivery systems helped to encourage and enhance the development of shared mental models of service delivery.

In summary, the value chain focus learning orientation was more illustrative than the 'label on the box' had suggested for this research. The continuum needs to be adjusted to better reflect the way in which multiple, interconnected value chains are involved by using criteria that reflect the interconnectedness of the multiple value chains.

Skill development focus – The guiding theory behind this orientation puts attention onto whether the organisation values learning and skills development that is aimed at the individual or the group and the building of those skills into what Senge described as 'personal mastery'. (Dechant, et al., 2000; DiBella & Nevis, 1998; Senge, 2006; Yorks, et al., 2003).

Overall, there was an emphasis on group learning and at times this was done at the expense of individual skills development. The body of theory above suggested that individual and group skills would have an important role and an optimal organisational learning culture would value both equally.

However, the PSO managers in this research were strongly focused on group learning. At TrackTech and BigCol team learning was regarded highly and while individual learning did happen in the service teams was appreciated it did not receive a great deal of support compared to group learning. As a contrast, at TechSci the individual skills of the experts was valued and operationalised as

professional development. Biggerville and Smallerville shared a clear preference for team learning but acknowledged the presence of long-serving knowledge “gurus”. While the SmallCol managers ‘bucked the trend’ by stressing that their preference for building individual skills was just as important as building team capability.

Although group learning was mostly valued, there were exceptions, such as at TechSci where some operational managers tended to go to the other extreme and build up knowledge silos with the attending organisational learning risks.

For the managers in this research, the team was the logical unit of their organisational learning. In some situations such as at TechSci where there was a focus on individual skills due to the specialist expertise required. However, even in those cases, the outcome of the individual skills focus was improved team capability.

This learning orientation has proved itself as a valuable part of the research lens. The way that managers choose to value and situate individual skills development for enabling organisational learning helps to expose cultural norms within the organisation.

8.3.2 *Facilitating factors*

As with the preceding discussion, this section also recalls from the literature review, in this instance, the facilitating factors of the integrated capability framework aimed at exploring why organisations learn. The following discussion links the body of theory behind the facilitating factors and relates them to the findings from the cases.

Scanning Imperative – The theoretical basis behind the scanning imperative suggests that if an organisation has an awareness of its broader environment and values what is “out there”, it will then develop the sensibilities necessary to anticipate problems and identify new opportunities (DiBella & Nevis, 1998; Jarrar & Zairi, 2000; Stuart, et al., 2005).

If the organisation is good at understanding what is beyond the borders of its normal thinking then it should have a wide base of organisational responses

beyond reacting or carrying out minimal adaptation in the face of disruption (Morency, 2005).

The managers in the research emphasised environmental scanning as an organisation wide concern and in terms of an individual responsibility. At TrackTech, environmental scanning dialog with international peers was the preferred means of scanning for the technical specialists. They regarded other forms of scanning as a leadership or specialist function of their strategy department. While at TechSci, scanning was seen as a part of their relationship with their professional peers. Yet another perspective came from managers at Biggerville and Smallerville who used customer satisfaction reports and complaints procedures to do “scanning by proxy”.

In broad terms, the managers in the research were mostly supportive of scanning by the organisation, however, they did not see it as something that shaped and guided their desire to learn about alternatives.

TechSci was an exception; they had pioneered an online delivery channel concept that was unique globally that had come about as a result of deliberate environmental scanning for new ways of delivering essential services. However, even within TechSci this was regarded as a one-off situation rather than a cultural shift that could be used to shape future initiatives.

In general terms, the scanning imperative was used by the managers as a mechanism for promoting and supporting organisational learning to discover strengths and weaknesses in their service delivery systems configurations.

In tactical terms, the managers tended to prefer using environmental scanning to learn more about their customers and customer interaction with their service teams. Or, they used it to go towards using scanning to learn about how their peers in similar organisations or functions were going about delivering similar services. The overall strategy of scanning helped them to promote and support organisational learning at the team level.

The scanning imperative was a valuable dimension in the research framework. Even for those managers for whom it was not a high priority, it was still a concept that they could relate to and appreciate. However, for a future version of the lens

the extremes of internal versus external focus could be adjusted to better reflect the ways the managers in this research used environmental scanning. This could be done by using ‘inactive’ at one extreme and ‘vigilant’ at the other.

Performance Gap – Theory informs us that the performance gap is manifested as an awareness of the difference between desired and actual performance (Kaplan & Norton, 1992). Theory around the performance gap also suggested that managers would learn and take corrective action when given feedback that arrived at the right time and in the correct form (Nevis, et al., 1995; Turner, et al., 2006).

At TrackTech and TechSci, the managers were aware that their performance according to their governing legislation required them to report on quantitative performance. They were well aware that the measures said little about the service experience received by the recipients of the service. As a result, the managers had one set of measures for general management, one for political accountability, and another public transparency purposes, all factually correct, but with quite different emphases. This suggests that PSO service management could be enhanced by using the performance gap to understand how to use qualitative measures of performance well as metrics approaches such as key performance indicators.

In-practice, the managers felt that these measures did not complete the service delivery feedback loop in a way that promoted effective organisational learning at the level of their service delivery teams.

At TechSci and TrackTech, their online service delivery products were radical departures from their former paper-centric products. In TechSci’s case, this initiative was launched because the managers and the professional community they served became aware of a fundamental inefficiency that could only be addressed by a disruptive technology shift (Rogers, 2003). .

The difference between optimal performance and delivered performance was something the managers in the research cases who had developed online alternatives were acutely aware of.

However, for some managers such as at TrackTech, being aware of the performance gap did not necessarily equate to a desire to close the performance

gap. The managers in those settings felt that they were in the business of delivering a level of service that met a price-performance expectation for a key stakeholder as a consequence they delivered to a satisficing¹⁸ strategy rather than to an optimal level.

This did not inhibit their organisational learning but instead added an interesting extra dimension where meeting strategic outcomes matters.

Overall, the managers had a sound appreciation of the service performance gap in their own organisational setting. The gap, as perceived by the service managers had a qualitative dimension that the performance reporting systems did not capture.

In summary, creating a learning culture that supported and encouraged service delivery systems development was an important consideration for all the managers.

The performance gap was also a very useful dimension in the research lens. However, it did not appeal equally to all the managers. Some understood performance management principles well and others less so. Setting some boundaries conditions for a future research lens, such as unappreciated at one extreme and operationalised at the other would help to better situate the emphasis that the managers put on learning about the performance gap.

Concern for Measurement – Organisational learning theory suggests that learning organisations with a concern for measurement of performance would go beyond the normal performance expectations and use their measurement concern as a means of surfacing contradictory practices and to critique their shared mental models (DiBella & Nevis, 1998; Kaplan & Norton, 1992; Schmidt & Finnigan, 1992).

The managers felt strongly that their concern for measurement was an important part of their organisational learning imperative. At TrackTech, the managers used their critical view of measurement to understand the divergent needs of the stake-

¹⁸ Satisficing – Herbert Simon's combination of satisfy and suffice to represent a bounded rationality strategy.

holding minister and the end-use customers. In addition, at Smallerville, the managers felt that the measures related to TQM compliance were aggregated with customer experience feedback to provide new knowledge and to improve service delivery systems learning.

At Biggerville, over-use of quantitative measures was thought to inhibit community engagement. These examples suggest that the service delivery managers in these research cases did indeed use a concern for measurement to actively enhance their organisational learning capability.

The service delivery managers indicated from this perspective, that measurement for compliance and measurement for improved understanding was not the same thing. The concern for measurement factor translated for some managers into an active desire to develop new ways of measuring activities.

Overall, the concern for measurement was an especially useful factor for learning about service delivery improvement in New Zealand PSO service delivery systems. Some managers became adept at providing multiple reports of the same service activity to suit different audiences. This created a concern for reporting more than a concern for measurement.

The managers across the cases used their concern for measurement to promote and support organisational learning. Some used that awareness to reinforce the case for formal quality management programmes. Others used it to communicate service expectations that went beyond the minimum necessary to meet leadership and compliance expectations. For capability building in an integrated organisational learning strategy this was an aspect that the managers shared a concern for.

For the future organisational learning research framework the focus needs to be on the extent and nature of the concern that the managers have for measurement. To this end the boundary conditions for this factor should be set at 'unconcerned' and 'concerned'.

Experimental Mind-Set – This factor is also described by DiBella et al (1998) in theory as organisational curiosity, the experimental mind-set factor was based on

the workplace as a ‘learning laboratory’ (Garvin, 1993; Nevis, et al., 1995; Senge, 2006).

Across all three dyads the managers were supportive of curiosity and experimentation as a cultural characteristic in their service delivery teams. However, for the service delivery managers in the research cases that support typically came with two caveats: Firstly, that experimentation was bound to management awareness and endorsement. Secondly, that experimentation was subjected to the organisational risk, change management, and benefits realisation procedures.

The rhetoric of the managers was largely supportive of an experimental mind-set. This was usually because experimental was seen as synonymous with continuous improvement and the managers were generally interested in quality management.

However, this endorsement was typically bracketed with the need for any experimentation by service delivery personnel to be aligned with the organisational hierarchy and process.

This goes against the idea behind having an experimental mindset that suggests it can acts as a ‘learning laboratory’ (ibid). That is, experimentation mindset is to encourage the testing and challenging of existing boundaries and practices.

Another concern was that the managers linked the experimental mindset with supporting innovation as a formal activity, managing the associated risks and formalised testing of ideas within the organisational boundaries and bureaucracy.

This factor did not sit too well with the managers. Even though they understood what it meant, they were generally uncomfortable with it in an operational sense. So, for a future version of the research lens this factor should be recast as ‘supported innovation’ with extremes set as ‘unsupported’ and ‘supported’.

Climate of Openness – The organisational learning theory behind this factor suggested that a learning organisation would make opportunities to participate in the organisations planning and problems solving processes (DiBella & Nevis, 1998; Lucas, 2005). This also draws on notions of legitimate peripheral

participation from Wenger (2000) and Argyris's (1986; 1996) defensive routines of managers.

The managers in the research were supportive of the idea of openness and acknowledged their service teams as ready to engage in innovative behaviour. However, as was the case with the experimentation factor, they attached several caveats to that approval which questioned the depth of their resolve to support openness.

At TrackTech and TechSci, openness was encouraged as long as the political and public reputation of the organisation was not compromised. At Biggerville, the managers and service agents who enjoyed the confidence of leadership gained more opportunities to promote their ideas than those without sponsorship.

At BigCol, openness was clearly linked to position or status in the organisation. The managers there regarded openness as a desirable characteristic although their ability to exercise it in practice appeared to be more limited than their enthusiasm. Even though openness was espoused, in practice, the ties to bureaucratic constraints were very strong.

Overall, there was enthusiastic support amongst the managers for informal networks and socially based interactions in the service teams. The extent to which these interactions resulted in organisational learning that translated into operational change and improvement was hard to establish.

Essentially, turning informal learning into actionable change, service delivery team members and managers had to obtain the formal support of their line managers and their structures or the ideas they advocated would not progress.

In summary, the managers in the research were largely in favour of openness but bound it to the organisation's norms and cultural memes. That had the effect of influencing how it could be used to encourage service delivery teams and managers to become fully involved in the service delivery systems strategy and development. This had the effect that some managers expressed discomfort at the idea of innovation and idea sharing taking place via any mechanisms other than officially sanctioned forums.

The research showed that the climate of openness factor was a helpful device for encouraging the operational managers to share their organisational learning experiences. However, to better reflect the scope of how the managers think about openness, for a future version of the lens the factor should be bounded with the ‘defensive’ and ‘open’ boundary conditions.

Continuous Education – DiBella and Nevis (1998) operationalise continuous education theory as “*the internalisation of a commitment to lifelong education at all levels of the organisation - p.71.*” This factor is also reflective of parts of Senge’s (2006) “Personal Mastery” where constant practice and learning at the individual level is linked to enhanced organisational learning capability.

The managers in the research appeared unconvinced that this factor was of any practical importance for them. Those managers were more concerned about how it could be operationalised within the workplace as professional development or occupational skills development than as lifelong learning.

If an employee was a talented ballet dancer or Olympic medallist in their own time that was of no particular concern to the managers. It was not valued as being of any practical benefit to the organisation’s learning capability.

The only exception to this was in one of the technical colleges where distance education for adults was part of their organisational mission. In that setting, there was interest in the concept but that did not translate into specific action to endorse life-long learning.

The managers in the research were happy to forego this factor of organisational learning entirely. Their education focus for service teams was predicated on skills development more than general education.

The research has indicated that the managers did not feel that, in any real sense, that this factor was particularly useful for the management and operations of their multi-channel service delivery systems.

In summary, the managers showed little alignment with this factor. While some of the organisations and managers recognised it had the potential to build diversity and intellectual depth within the service delivery management and teams

- for the managers in this research, it was a ‘step too far’ and they felt it was beyond the scope of what their management functions represented. As such did little for accommodating differences in the learning styles of their service delivery teams.

Based on the findings from these managers, a future version of the research lens should drop this factor entirely.

Operational Variety – Organisational learning theory suggested that a pluralist approach to operational variety would be better equipped for learning by having more options and role models available for any given situation (DiBella & Nevis, 1998). There is, however, an interesting tension at work. Accommodating plurality of approaches is a potential enabler of fresh thinking and new ideas. However, it is also at odds with the teachings and principles of a large part of management practice and quality assurance wisdom (Nevis, et al., 1995; Schmidt & Finnigan, 1992).

Quality programmes that actively discourage plurality were operationalised in case organisations such as: TQM at Biggerville, Baldrige™ criteria at Smallerville and Kaizen™ at BigCol. In these three cases the managers were clearly absolutist and regarded operational variety as extremely undesirable in their service delivery teams. In one of those settings the commitment to quality management endorsed their culture that valued capability maturity based on repeatability and consistency of services.

In a specific delivery context, where service agents were dealing with elderly and homeless citizens at Biggerville, there was a willingness to conditionally endorse plurality of methods for specialist kinds of services that involved community engagement and when the experienced service agents were dealing with situations that required a depth of intuition and experience.

At SmallCol, an interesting dichotomy emerged between the absolutist service delivery of the process-centric enrolment division of the business of being an education institution and the desire to accommodate plurality of learning styles and changing pedagogy needs of their academic and learner communities.

Overall, the New Zealand PSO cultural norms that value certainty of outcome and commitment to compliance; made any real buy-in to operational variety difficult. Despite pockets of pluralism, the managers felt that the whole culture of New Zealand PSOs would need to change before this would be acceptable at anything but the smallest operational scale.

Theory suggests that suggests pluralism indicates a willingness to learn and absolutism an unwillingness to learn (DiBella & Nevis, 1998). Instead, the managers in the research showed that for some settings pluralism is appropriate and in others it is not.

In summary, the opportunities for supporting learning differences through plurality were passed up in favor of an absolutist stance by the managers.

Despite this polarization, the organisational learning factor itself is helpful because it encouraged reflection about the way the service teams were configured. As such it should remain unchanged in the future version of the research lens.

Multiple Advocates – The theory behind organisational learning multiple points of advocacy suggests that ideas need diffuse support and endorsement (DiBella & Nevis, 1998; Weick, 1991). This came not only from those with the authority of rank, but also from those with the authority of knowledge from elsewhere in the organisation. DiBella et al (1998) suggests that the greater in number and the more diffuse these advocates are, the more likely it is for organisational learning to become embedded effectively.

In the research cases the managers reflected that championing of ideas was accepted practice and new ideas being generated in the service teams were encouraged. The support and championing of those ideas still needed to follow the traditional management lines. As an example, Biggerville and TechSci the managers felt this was due to the departmental configuration of their organisations and others thought it had more to do with politics, relationships and status.

Overall, the PSO managers in this research did not have a strong commitment to multiple-advocacy in their service delivery practice. For them, the organisational hierarchy was the dominant concept and the CEO was the dominant champion for

innovation to be regarded as significant. Non-bureaucratic advocacy of ideas and innovations was largely unsupported.

Overall, the managers understood the role of champions but could not let go of hierarchy and departmental boundaries – this inhibited the useful potential of this factor in their organisational learning. This had the effect of reducing the potential learning benefits of having advocacy.

In summary, the New Zealand public sector environment is a hierarchical culture that from the perspective of the managers was not supportive of ad-hoc or improvised initiatives that may attract adverse attention or create risk.

This factor was a useful concept for encouraging the managers to consider how advocacy functioned in their organisations. However, for a future version of the research framework the extremes of ‘hierarchical’ and ‘distributed’ need to be added to reinforce the context.

Involved Leadership – Organisational learning theory acknowledges that strong leadership is a key to setting and maintaining a message about what knowledge an organisation needs to acquire (Garvin, 1993; Schein, 1992; Senge, 1990). It has been suggested that the problem lies in organisational dissemination and utilisation of that knowledge and that organisational learning is enhanced when senior leaders actively engage in the processes of implementing the knowledge acquisition vision (Crossan, 2003a; Huber, 1991).

For the managers in this research, this factor elicited a variety of responses. Some managers such as at Smallerville and TechSci felt their CEO and leadership teams were completely engaged and actively helped with identifying and creating the vision about what their organisational learning should be. Other managers such as at TrackTech and BigCol felt their leadership did not see that degree of engagement as a necessary part of their brief. While at Biggerville, the managers reported that their leadership had become actively disengaged from the knowledge dissemination and utilisation conversation.

Overall, the mixed response suggests that, for some in this group of New Zealand PSOs, involved leadership was an evolving process. For some it was delivering

organisational learning dividends and others were missing out on the opportunity entirely.

In summary, in the settings where managers felt their leadership communicated positive messages about using organisational learning to enhance service delivery systems, there was a shared feeling that their leadership was removed from the practice of organisational learning.

This factor was helpful for encouraging managers to reflect on their organisations leadership involvement. For a future version of the research lens this factor should set the extremes as ‘disengaged’ and ‘engaged’.

Systems Perspective – The systems perspective factor represents the ability of organisations to take a holistic and systemic view of their relationships with other parts of the business (DiBella & Nevis, 1998; Murray, 2002; Shrivastava, 1983).

Amongst the managers in the research cases there was a mixed response to systems thinking as an enabler of organisational learning. At TrackTech, systems-thinking was a CEO sponsored initiative. The managers had “taken the systems thinking pill”. As a result, they used systems thinking as a universal solution for any organisational configuration issue. For these managers the approach resembled Maslow’s (1966) hammer - *“if all you have is a hammer, everything looks like a nail.”*¹⁹.

At TechSci, Smallerville and BigCol, the managers felt that thinking beyond their discipline boundaries was something to be discouraged. Although they valued systems thinking intrinsically, they saw their functions as siloed and in need of a systemic view.

While at Biggerville and SmallCol, there were some managers who regarded systems thinking as a job best left to senior leaders. Among these groups there were opportunities to strengthen their organisational learning capability through a more directed attention to the systems perspective by service delivery managers.

¹⁹ ..This quote has also been variously attributed to Bernard Baruch.

The systems perspective as suggested by Senge's 'fifth discipline' remains an important aspect of organisational learning in the New Zealand PSO service delivery context. As such it still has a critical role in a future version of the research lens. However, the boundaries should be adjusted in light of the discussion above to use 'Systems-siloed' perspective at one extreme and a 'Holistic systems' perspective at the other.

8.3.3 Linking back to theory section summary

This concludes the discussion on the aspects of organisational learning that the theoretical lens introduced. As a result, it has introduced different ways of thinking about the initial research lens. In the next section of this chapter these aspects will be expanded upon and the emerging themes synthesised towards the new research model.

8.4 Emerging themes and changes to the research lens arising from the findings

In this section the themes that arose in the course of the critique of the research lens in the previous sections are discussed with a view to: identifying those constructs that worked well, replacing or removing existing constructs, adding new constructs, and formulating these additions and alterations into a new candidate research lens.

The changed aspects of the research lens arose from analysis of the novel interpretations of organisational learning by the managers. These suggested an existing orientation or factor needed alteration to reflect the New Zealand PSO service delivery context. While in some situations, the managers raised a new aspect of organisational learning that was not addressed by the existing lens.

In addition to examining the lens items themselves, the labels attached to the boundaries or approach conditions are also reviewed. In some orientations and factors the labels represent a preferred approach to the orientation or factor. Such as; in the dissemination-mode orientation the formal versus informal labels are used to describe a preferred approach. While in other orientations and factors, the labels are used to represent extreme boundaries that mark a continuum that helps

to position the discussion. For example, in the concern-for-measurement factor the continuum spans the boundaries from unconcerned to concerned.

The first section below considers aspects that are unchanged in the research lens. This section is followed by the aspects of the lens that replace existing aspects. Following that section are the new aspects of the lens. These three discussions lead to the presentation of the candidate model in section 8.5.

8.4.1 Organisational learning aspects of the research lens that do not change, or are adjusted.

In the following discussion those parts of the existing lens that worked ‘as it said on the box’ are discussed. The initial orientations and factors used were based on existing literature and required adaptation on the basis of the research findings.

8.4.1.1 Learning Orientations

Five of the seven original learning orientations are retained in the new research model. They are knowledge sources, documentation mode, dissemination mode, learning focus and the skill development focus. Each is discussed in turn below.

Knowledge sources – The knowledge sources orientation well represented the extent to which the service delivery managers preferred to accumulate knowledge about service delivery practices. The existing research described in section 8.3.1 suggested that a preference for internal or external sources would be evident at an organisational level. The new research model brings this orientation through without modification.

Documentation mode – The documentation mode factor was useful for exploring knowledge management practices and attitudes among the managers as described in section 8.3.1. The tacit and explicit poles formed helpful boundaries for exploring whether the service delivery teams and managers emphasised procedures and processes or whether they preferred to put their emphasis on the socially constructed expertise of individuals and teams. However to better reflect how the New Zealand PSO managers regard their documentation mode the dimensions are relabeled as ‘Personalised’ and ‘Transferable’. This relabeling will help to better situate the learning orientation in the PSO context.

Dissemination mode – The dissemination mode orientation also worked well for this research and does not warrant change for future research. This orientation has the potential to be used in deeper research into communities-of-practice and knowledge dissemination in existing and emerging PSO organisational configurations such as matrix and network management. When used in that way and situated along with the other dimensions in the research model, it has the potential to describe the rich knowledge flows present in PSO service delivery settings. This orientation is brought through to the revised model without any change.

Learning focus – This orientation worked as expected and helped build a rich description and understanding of the role of transformative versus incremental learning in PSOs. The orientation is brought through to the new model with no change.

Skill development focus - This orientation also worked well and helped to develop an understanding of how the organisation values team learning about service delivery systems compared to the building up of individual expertise as was described in section 8.3.1.

8.4.1.2 Facilitating Factors

Scanning imperative – This factor was especially helpful for understanding why the managers chose the learning strategies that they did. It did this by illustrating the extent to which the managers valued reaching out beyond their organisational borders and operational concerns, as described in section 8.3.2.

Some managers were more attentive than others about the extent to which they valued the scanning imperative, while, some were especially vigilant, and others did not pay any special attention to the need to scan at all.

As a result the extremes of this factor have been adjusted to ‘Inactive’ and ‘Vigilant’.

Concern for measurement – The managers in most of the settings could relate easily to this concern because feedback and adaptive learning has been a routine part of accepted good management practice for a long time as discussed in section

8.3.2. This was especially the case for those managers used formal quality management systems.

However, it also helped to reveal the emphasis and reliance that some managers put on metrics that did not represent traditional notions of good service.

In future research this factor is worth building upon further and should be used to discover how managers cope with the increased complexity that multi-channel service configuration introduces.

The boundaries of this factor in the revised model are situated as ‘Unconcerned’ and ‘Concerned’.

Climate of openness – This factor was especially revealing in the research. Many of the service managers genuinely believed that their service functions were open and receptive to different information sources. However, the norms and memes of government bureaucracy were never far below the surface of their practices.

Overall, they were receptive to ideas coming from anywhere in the organisation but almost always qualified acting on those ideas with the need for formal endorsement by management to be taken seriously.

The manner in which this factor helped to expose, understand, and offer explanations for this seemingly contradictory behavior suggests that it is a valuable construct for future research.

As such it is carried through to the revised model with the boundaries represented by ‘Defensive’ at one extreme and ‘Open’ at the other.

Operational variety – Accomplishing work goals is at the heart of service delivery for the managers in the research, while plurality of methods was unacceptable to many of the managers.

The factor itself was extremely useful to help understand why these managers would chose to reject a potentially rich source of organisational learning in favor of certainty and repeatability of outcome.

The boundaries are adjusted to ‘Absolutist’ and Pluralist’ to reflect the way the PSO managers in these research case thought about operational variety.

8.4.2 Organisational learning aspects that replace constructs existing in the research lens

In the following section the learning orientations and facilitating factors that did not align with the research findings are discussed. Overall, each of the constructs to be replaced was a useful part of the lens for the research to date, with the exception of continuous education. The intention is that the replacement constructs inherit the suitable characteristics of the ones being replaced and that the replacement version is more sharply focused than its predecessor.

8.4.2.1 Learning Orientations

Outcome – Process focus - This orientation is proposed as a replacement for the product-process orientation because many of the service managers viewed their service outcomes as their information product as discussed in section 8.3.2.

The New Zealand PSO managers had different motives than their counterparts in commercially oriented corporate-sector service managers (DiBella & Nevis, 1998). The product-process orientation boundaries did not work as well as the literature suggested (ibid). The managers described a different kind of added-value emphasis.

However, the managers did appreciate that there was a defined value-proposition for their service delivery and this had an important role to play in their organisational learning so the orientation itself is sound but its boundary conditions were weak.

In support of that concern, DiBella and Nevis (1998) also encountered this weakness in their use of the product-process orientation within health care settings (ibid). They addressed the weakness by modifying the boundaries of their product-process orientation to be content-process with some success. That modification was potentially a better way of dealing with non-commercial settings, but their change does not fit well in the context of this research either because content is too closely related to product.

The new Outcome-Process Focus is used in the same way as Product-Process but with an emphasis on service outcomes rather than tangible product or content.

In addition, using the boundaries are adjusted to 'Service' and 'Process' in the revised model to better situate the extremes of the factor onto how the service managers in the research cases viewed themselves and their service functions.

Value chain focus – This orientation is modified to be bounded by independent and interconnected boundary points instead of taking a pre-engineered versus a marketing focus. In the analytical lens used in the research, the value chain orientation was bounded by the pre-engineered make-and-deliver compared to the marketing oriented design-and-sell ideal state. For the PSO managers, their service delivery practice was pre-engineered by legislation, policies and their service mandate.

Even though the value chain is primarily a tool of organisational configuration for competitive analysis (Porter, 1980), it retained meaning and relevance for the PSO managers. However, for them the service value chain they managed was not readily described by one value chain. Instead, their interpretations described multiple interconnected value chains especially in the multi-channel settings where they needed to integrate across multiple virtual and physical delivery media.

The change of boundaries better reflects the way in which the PSO managers operationalise their service delivery. For example, the value chain at TechSci was tended towards the independent end because the value system in their service context co-produced value with a closed group of professionals. On the other hand, at Smallerville a complex network of interconnected value chains was used with their service delivery systems.

As a result the Smallerville managers worked with their suppliers to involve them in creating and delivering service value, learning about and understanding the interconnectedness of their multiple value chains built mutually beneficial new knowledge about the value chains of the PSO and of their suppliers.

8.4.2.2 Facilitating Factors

Performance gap – the factor needed an expansion of its scope to include an awareness and acceptance by the managers of satisficing strategies (Ballantyne & Varey, 2006). The complex, ambiguous and at times contradictory service expectations placed on the managers led them to adopt a pragmatic attitude to their learning about what was an ideal service delivery systems configuration.

Instead of using their awareness of a performance gap to configure ideal service delivery systems, the PSO managers were instead skilled in determining a ‘best-fit’ satisficing service delivery model that they could operate without under or over delivering services to customers.

For example, at TrackTech the stakeholding minister was the customer who wanted a least cost service, while the end recipients of the information products wanted their ‘widget’ in the shortest possible timeframe. The PSO service managers were skilled at learning how to balancing those conflicting needs.

The constraints that restricted their ability to offer optimal service delivery performance included: budget restrictions and trading off standards compliance with professional best practice obligations.

As a result, the definition of this factor in the research lens is adjusted to better represent the way that New Zealand PSO managers’ trade off optimal service configuration for practical reality.

Involved leadership – The leadership factor of the research lens needs to be expanded in scope to address the role that cross agency leadership, professional collaboration communities and whole of government initiatives impose on the way in which leaders choose to engage in service delivery learning.

Involved leadership was an important and relevant factor in the research lens. However, it focused on the manner in which senior leadership chose to engage or not with the service delivery systems organisational learning processes.

This aspect of the lens needs to be enhanced to better reflect the more complex leadership networks at work in the New Zealand public sector setting. While the CEO and senior leadership team did have a pivotal role to play - as seen in this

research the expression of leadership values about what systems learning aspects requires particular emphasis. To explore this, the ideal-state boundaries of disengaged and engaged leadership have been added to the lens.

Supported innovation – The experimental mind-set is better accommodated in an improved research lens by expanding its scope to encompass an innovation culture supported by organisational management and configuration.

For example, at TrackTech and TechSci to deliver high quality multi-channel e-government services to citizens, overly prescriptive legislation and regulations can represent a barrier to innovative practice for the managers who have to deliver on the promises of the legislation. For example, for some of the cases the information product or ‘widget’ was prescribed in legislation allowing little flexibility for the managers to deliver according to the changing needs of their customers.

For PSO managers to deliver efficient and effective services the obligations for compliance needs to allow for adaptive learning. In the research, this was illustrated by the innovations that were made possible at TechSci when the governing legislation for one of their services was adjusted to accommodate an intent-based service model where the PSO agents and the customer could co-produce the service artifact.

Knowledge transfer – This factor replaces continuous education, because of the universally weak support for the continuous education factor was interpreted to be a cultural characteristic of the managers in New Zealand PSO context.

The boundary conditions for this factor are individualised at one end and socialised at the other. For example, within TechSci both conditions existed. For the technical specialist group, individualised knowledge transfer was the preferred learning style whereas in the same organisation the service desk function had a socialised knowledge transfer learning style.

However, it was not altogether a good reason to completely doubt the salience of the factor itself. This would be worthy of future research inquiry in order to better understand why managers this culture treated continuous education as they did.

8.4.3 Organisational learning aspects that were identified as new to the research lens

In the research, the following new organisational learning themes emerged that the existing research lens did not cover. The discussion below suggests new constructs for the new version of the research lens.

8.4.3.1 Learning Orientations

Service performance focus – For the managers in the research, organisational learning about performance of the service function in the PSO created extra complexity.

The managers had stakeholders and complex political dimensions to consider. In addition they were subject to public accountability via citizens-as-governors as well as being obliged to meet commercially oriented service delivery performance norms and expectations.

This led to a different kind of performance expectation than the performance referred to in the performance gap facilitating factor that addressed the quality of service encounters in expectations-performance terms. Instead, this new orientation is concerned with the broader focus that managers put on the holistic service function of the organisation and organisational performance.

For the service delivery managers, the service function performance is an orientation that they already understand well because it is reflective of good management practice. They identify key performance indicators for the service function, define relevant metrics, and then get on with measuring and reporting on those metrics.

However, in other respects it is problematic; some of the managers in the research felt they had a social contract to fulfil. For example:

“...our first focus is really engaging with the community, to do that you really have to converse with them to understand and listen” – OPM at Smallerville.

With this complexity in mind, the performance gap and concern for measurement factors were too narrow to fairly represent the complex reality that service systems performance in the New Zealand PSO setting needs.

Public sector systems alignment focus – The way that PSO organisations in the New Zealand public sector setting went about operationalising their multi-channel service delivery practices was more messy and indeterminate than Sousa and Voss's theoretical representation suggested (Sousa & Voss, 2006). For most of the managers, the SDS was entwined with their wider organisational mission and systems.

Service delivery systems in PSOs are hybrid systems not readily aligned with IT applications or clean organisational boundaries. The manager's team learning and the organisation's operational priorities meant that in New Zealand PSOs the service delivery systems hardly ever exist in a steady state. Nor do they have clear operational boundaries that are clearly consistent with Sousa and Voss's conceptual model (see Figure 5 - Sousa and Voss's (2006) model of multi-channel service delivery). Instead, a different way of thinking about these systems is required that better reflects the dynamic and overlapping nature of the systems involved. This research suggests that finding a new means of representing service delivery systems alignment in the public sector is an important area for future inquiry.

Stakeholder complexity – This is an important new factor for consideration in the research lens. New Zealand PSO managers are public servants with many masters to please. They are employed in corporate-style organisational hierarchy's that are typically headed by a career-oriented CEO working on a performance bonus.

At the same time, the managers can be called to answer to Ministers of the Crown who have political, executive, and governance powers in terms of specific acts of parliament and regulations.

On top of that, the managers may also be accountable to professional standards bodies depending on their skills and qualifications.

“If something happens because of the legislation and the way that the business works they are probably more likely to be involved ... due to legislation it’s their statutory and professional obligation to figure out what’s going on rather than just dealing with the budget and the high level stuff.” – GM at TrackTech

They were open to scrutiny from the press, public and regulators in ways that commercially equivalent organisations rarely experience.

This complex matrix of stakeholder salience does not occur in a fixed plane of action; it is subject to changing power relationships, urgency of tasks and is subject to the influence of external events.

The research lens did not adequately account for the strong influence that stakeholder dynamics has on the culture of the PSO managers and how it shapes their organisational learning and the sharing of mental models.

8.4.3.2 Facilitating Factors

Information stewardship factor – This factor enhances the research lens by adding a new construct that incorporates a means of describing how the managers viewed their roles and responsibilities to the community they serve.

A recurring theme in the research was the way in which the PSO managers thought about their duty to preserve information. This went beyond good data management practice and went into the need to preserve and maintain the data for future generations and included information sovereignty.

In many PSO situations the data that the organisations were acquiring, aggregating and delivering formed part of the nation’s accumulation of sovereign knowledge. Those data represent long-term value that extends beyond the political, departmental or systems lifecycle to govern, create and maintain the data.

As the machinery of government moves deeper into an e-Government centric delivery model the long term life and preservation of information assets will need to be carefully managed.

Increasingly, citizens and service agents are creating and manipulating data in novel ways using sophisticated online and participatory technologies. The PSO managers are concerned with what happens to that information in the long term.

Public sector culture factor – An additional factor for the research lens that represents the way that public sector managers are motivated by their sense of duty to public service is added.

While considering SDS configuration in the research an aspect that stood out was the strength of the New Zealand public sector culture and how it affected and shaped the managers learning about multi-channel service delivery.

Overall, these managers could be characterised as having a very high job-task loyalty combined with generally high ethical standards expectations of themselves and their service delivery teams. This sense of collectivism and shared responsibility to manage state activities underpinned how the managers viewed their responsibilities.

Political influence factor – This new factor in the lens is required because the managers worked in a political context as well as within an operational service delivery context. The need to be operationally accountable and meet political expectations as well as delivering on the scope of their mandate, as well as interpreting and delivering to the intent of legislation to shape how the managers view and operationalise service delivery systems.

Public sector customer factor – A new organisational learning factor is necessary to reflect customer and service delivery system co-production. In the research, the customer was a person that was the recipient of an information product. That product was delivered as a result of interaction with a service delivery system via an agent either in-person or intermediated by a virtual communications channel.

That already complex setting becomes even more complex when the services have to be delivered on behalf of the Crown to individuals or constituencies in order to accrue benefits for public good. This is not always to the immediate or ongoing benefit of the service recipient themselves.

There were three main types of public sector customer relevant to this research: the compulsory customer, the voluntary customer and the owner-customer.

The compulsory customer type arose when the customer was subjected to the laws of the Crown for civil, criminal or compliance reasons.

The voluntary customer type was engaging by choice in order to procure goods and services from a Crown owned or controlled agency or business. The state customer in this setting was akin to the more traditional commercial willing seller-willing buyer relationship.

The owner-customer type was exercising their constitutional right to access governance information from the state. In this setting, the customer wanted gain access to the informational products of government agencies in order to exercise their democratic right to monitor and comment on their activities.

In a private sector commercial setting the organisation's owners and managers can choose to what extent they wish to provide access to the policies, procedures and actions of the organisations. Only in certain exceptional behavior situations such as anti-competitive actions, insider trading, and criminality do private organisations have to open themselves to scrutiny but certainly not to a generally-curious press or public in the way that public agencies frequently have to do.

However, in the state sector, scrutiny of the wider public or the fourth estate is broadly considered good governance. How the organisation deals with requests for informational products of this type, whether information about the chief executives credit card spending, publishing of service performance data, or publishing of organisational configuration details is a measure of good state sector management.

The implication of this is that the PSOs in the research did not necessarily have a clear view in every customer encounter situation of the mixture of customer types that they were dealing with. It is entirely possible that all three situations could occur in a single customer conversation

8.5 A candidate model for organisational learning among service delivery systems managers in New Zealand PSOs.

This section introduces the model that arises out of the previous analysis. There are ten learning orientations and thirteen facilitating factors in the revised model. Each of the orientations and factors include the labels for the boundary states.

As with the original research model, actual organisations, managers and service delivery teams have multiple interpretations of what these states mean for them in their individual organisational contexts and are very unlikely to put themselves clearly at a defined pole or even at a single position in between.

For some managers, there will be a clear preference for one pole at the expense of the other. While, for others there will be a desire to find the happy median where elements of both extremes can be accommodated.

The lens presented here represents the accumulated learning from this research and is presented as a potential starting point for future research into this branch of organisational learning in public sector multi-channel service delivery within the limitations of generalisation with the research methodology used in this study.

Some new labels have been introduced to clarify the intent of the orientations and factors. The risk with labels is that they introduce a subjectivity not intended. These are boundary states and are ideal and as value free as possible. Managers may choose to emphasise one dimension and not another for management, political or practical purposes.

Learning Orientations

How Organisational Learning occurs in PSO MC service organisations.

<u>Knowledge</u> Sources : Internal ↔ External Documentation Mode: Personal ↔ Public Dissemination Mode: Formal ↔ Informal	<u>Learning</u> Focus: Single Loop ↔ Double Loop Skill Development: Individual ↔ Group
<u>Service</u> Performance: Holistic ↔ Fractional Outcome: Product ↔ Process	<u>Systems</u> Value Chain: Stand Alone ↔ Interconnected Alignment: Separate ↔ Integrated Stakeholder network: Simple ↔ Complex Risk Awareness: Tolerant ↔ Averse

Facilitating Factors

What factors influence Organisational Learning to occur in PSO MC service organisations.

<u>Knowledge acquisition</u> Environmental Scanning A concern for measurement of service activity Priority put on knowledge transfer	<u>Organisational culture</u> Openness Operational variety Multiple advocates of service learning Involved and engaged leadership Information stewardship Management of political influence Public sector customer complexity
<u>Organisational capability</u> Systems thinking perspective Awareness of best practice Supported innovation Awareness of performance gaps	

Figure 9 - Revised framework of organisational learning in Multi-Channel Public Sector Organisation service delivery

8.5.1 Description of revised Learning Orientations

The revised learning orientations are grouped under four headings that represent the specific aspects of learning orientations: knowledge, learning, service and systems

8.5.1.1 Knowledge aspects

Knowledge sources – This orientation is used to explore the mechanisms through which service managers acquire new knowledge about service delivery practice.

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This orientation is bounded by the preference to rely on **internal** resources and experience at one end and reliance on **external** sources for advice and wisdom at the other.

Documentation mode – This focus orientation explores the attitudes and behavior among service managers acquiring new knowledge about service practice. It is concerned with how the organisation values its accumulated knowledge store.

It is bounded by **personal** acquisition of knowledge at one end where organisational knowledge resides with experts and ‘gurus’; at the other end of the continuum knowledge is treated by the organisation as a **public** or shared objective resource that is easily transferred and stored.

Dissemination mode – This orientation mode refers to how the managers regard the propagation and social communication of learning outcomes within the organisation.

The boundaries of this mode span from the **formal** documented procedures and hierarchical communications at one extreme to **informal** ‘water-cooler’ conversations and loose social networks that contribute to the organisational culture.

8.5.1.2 Learning aspects

Learning focus – This focus orientation is used to explore how the managers use their organisational learning to support team practices. This is done in the form of **single-loop** incremental learning at one extreme or, at the other extreme, to explore if and how they encourage the testing of the basic assumptions in the form of the **double-loop** transformative learning focus.

Skill development focus – This orientation focus provides the means to explore the way in which service managers’ use organisational learning to building long-term organisational capability through building appropriate expertise in individuals or teams.

The bounds of the orientation contrasts **individual** and **group** learning while recognising that both are intrinsically necessary for effective organisational learning to occur. While these extremes are useful markers, it is not possible for an organisational learning setting to be exclusively at one pole at the expense of the other; group learning involves individuals sharing their experiences.

8.5.1.3 Service aspects

Performance of service focus – This new orientation focus is concerned with exploring the focus that managers put on the service performance of the organisation and its contribution to organisational learning.

The bounds for this orientation span from service function that encompass **holistic** customer satisfaction outcomes for customers at one extreme and **fractional** outcome that comply with documented standards at the other.

This orientation differs from the next outcome of service orientation in that the emphasis here is on customer outcomes rather than organisational outcomes.

Outcome of service focus - This orientation is focused on the need to explore the means that service managers' use in their organisations to accumulate knowledge about the productive outcomes of service activity from an organisational learning perspective.

It uses **product** focus at one boundary to describe the managerial preference for achieving a productive outcome regardless of the means through which it is achieved. At the other boundary is a management preference that emphasises adherence to **process** as the primary driver of services.

8.5.1.4 Systems aspects

Value chain focus - This focus orientation is predicated on the assumption that organisational learning occurs in areas of core competence and as a result managers focus their learning efforts onto building those competencies. But that in contemporary multi-channel configurations, multiple, interconnected value chains are present and shape where and how managers focus their organisational learning efforts.

This orientation is bounded by the **stand-alone** and **interconnected** value chain extremes. It explores how the service managers view their value chain; as a single integrated value chain where their service delivery function is a component at one extreme or, viewing it as an interconnected network of value chains, each with its own set of organisational learning dependencies and expectations.

Systems alignment focus – This focus orientation represents the organisational learning capability needed by the managers to align their service delivery systems models with the wider organisational mission and systems thinking.

This orientation is bounded by a **separated** viewpoint at one extreme where the service function sees its business function as separate from the organisations overall mission and an **integrated** approach at the other where the services function and its associated learning is aligned seamlessly with the organisational goals.

Stakeholder network complexity - This orientation explores the influence that complex stakeholder dynamics has on the organisational learning requirements of PSO managers.

At one extreme is the **simplistic** viewpoint where there is an uncomplicated customer-as-a-stakeholder position where service managers only have to focus on customer satisfaction while at the other extreme a **complex** stakeholder matrix incorporating power, urgency and legitimacy issues that require service managers to employ multiple learning and communication strategies.

8.5.2 Facilitating Factors

Scanning imperative - This factor describes learning through searching and knowledge acquisition about good service delivery practice. It extends beyond the service teams knowledge bases and helps to identify learning strategies for seeking and building new knowledge through better understanding of the operating environment.

The bounds for this factor stretch from the inactive situation where managers do not feel it is important for them to scan their wider environment at all to the hyper-vigilant at the other extreme where those managers are constantly looking

around for changes in any part of their environment that may warrant changes in how they view their services.

Performance gap – This factor explores the managers’ perceptions of the gap between actual and optimal service delivery performance. Understanding the gap helps managers identify how their service teams performance is, or should be, measured. The performance gap factor encompasses an awareness and acceptance by the managers of any satisficing strategies that they use to establish the ‘best-fit’ service delivery model that they could operate without under or over delivering services to customers.

Concern for measurement – This factor addresses the organisational learning that arises from caring about the how, what and when of service performance measurement. It is concerned with identifying appropriate metrics and how they are subsequently used to surface, challenge or validate mental models and empowerment of future organisational learning.

Supported innovation – This factor explores how organisational learning is used for the fostering of new ideas, methods and approaches to service delivery. This factor includes a management endorsed innovation culture. In addition, it represents the flexibility for the managers to address the changing needs of their service delivery environment “on the fly”.

Climate of openness – This factor assists exploration of the extent to which the organisation allows for debate and challenging of organisational norms without regard to hierarchy. It builds on the leaning focus orientation by specifically exploring defensive-routines amongst groups of managers’ and the ways that mistakes are valued as learning opportunities. It also helps to build understanding of how systems learning opportunities arise from service related problems and issues.

Operational variety - This factor explores the organisations attitudes towards variation and change within operational delivery and translates that learning through experimentalism into new methods. Understanding how the organisation values pluralistic competencies and variety in methods, procedures and systems

develops insight of how organisational learning thinking contributes to service delivery systems evolution.

Multiple Advocates Advocacy is a recognised means for ideas to propagate within an organisation. Exploring how new ideas and methods about service delivery are welcomed and championed, helps to build an understanding of the role of advocacy in service delivery system. Champions exist at all levels in the organisational hierarchy. This factor is concerned with the extent to which the pattern of championing and advocacy mirrors the organisational configuration. At one extreme this factor represents the situations where champions and advocates exactly match the organisations hierarchy or at the other extreme champions are distributed anywhere in the organisation and could champion anything.

Involved leadership – This factor explores how leaders become actively involved in articulating a vision; interacting with members of the service delivery, and become actively involved in educational programmes, as perceived by the operational managers of those systems. This includes cross agency leadership, professional collaboration communities and whole of government initiatives has on the expression of leadership values about what systems learning aspects require emphasis.

Knowledge transfer priority – This factor explores the priority that managers attach to the flows of knowledge in their service delivery teams. This factor is a companion to the skill development and dissemination mode focus orientations. At one extreme this factor represents the knowledge transfer that occurs from one individual to another individual or to a group in a top-down manner as compared to fully socialised knowledge at the other extreme where the transfer of knowledge is wholly owned by the group.

Best practice capability factor – This factor explores organisational learning effectiveness taking place within service delivery practice. Managers develop their shared mental models about what is good or effective practice by drawing on their own and the experience of other to determine what best practice is and how it should be enacted.

This factor differs from the performance focused factors in that it represents latent service delivery. The performance gap and concern for measurement factors explore operationalised service delivery and their related concern with compliances. Whereas, best practice capability encompasses service ideals that may not yet have been operationalised or enacted but are still represented in the organisational learning of the managers. This factor represents emergent capability where practice is developed in an ad-hoc manner in response to service failures at one extreme and anticipated practice capability at the other and where organisation learning is translated into capability ahead of being required.

Information stewardship factor – This factor stemmed from a recurring theme in the research where the managers strongly expressed a sense of duty towards the information assets they were charged with maintaining. This goes beyond any particular iteration of the systems lifecycle to represent the long term life (or lives) of the information itself. This factor represents the techno-centric information management at one extreme where managers focus only on building effective present-day containers for the information and meeting current service delivery needs. In contrast to the other extreme where managers can take an info-centric view and regard the present-day systems as transient containers for information that will have future value.

Political influences – This factor embraces the political dimension that resides just beneath the surface of any conversation about service delivery systems with public sector managers.

The managers in the research were constantly trading off the need to comply with governing legislation or regulations that prescribe actions and creating the need to fulfill their public service mandate. This can also require meeting multiple obligations from different legislated requirements.

In addition, it explores the way in which the change cycle for public sector service delivery systems can be very long when acts of government are involved. This can strongly influence the ability for the managers to influence aspects of their service delivery systems.

Systems Perspective - The systems perspective reflects the degree to which managers view their organisation as a systemic whole. This factor is concerned with systems thinking and a holistic systems perspective as an organisational learning characteristic of teams and organisations. It includes elements from the systems alignment orientation but has a different emphasis.

8.6 Concluding comments for Chapter 8

This Chapter has conducted a meta-analysis across the Dyads and observed that the PSO managers have a lot of commonality in the way they view organisational learning capability. This led to a discussion about the organisational learning theory that framed the research lens.

From there, the chapter turned a critical eye onto the lens itself to identify the emerging themes from the research. This led to acknowledging some constructs as useful as they are, changing or replacing others, and proposing some entirely new ones.

This analysis led to the new candidate lens for researching organisational learning in New Zealand multi-channel PSO service delivery functions.

In the following Chapter 9 the conclusions and implications of this research are presented and discussed.

Chapter 9 Conclusions and Implications

This chapter begins with a discussion of the contribution of this research to the field of information systems. The second part addresses limitations of this type of research and the third part discusses the empirical findings make contribute to knowledge and practice. In the third part of the chapter, the discussion continues to present how these empirical findings contribute to the service management, systems planning, professional development practice, and multi-channel service delivery systems definition. The final part of the chapter presents the researchers concluding remarks. It then discusses what those findings mean for future empirical research into: organisational learning, multi-channel service delivery systems, PSO service management, and social constructionist research in the information systems discipline.

This research makes a contribution to addressing a lack of empirical research on the unique PSO multi-channel service delivery context, the site-specific cultural characteristics of the managers involved. It also addresses a knowledge gap that exists about service management in the public sector context. The assumption that what is good service management in the private sector is able to transfer to a public sector context without consideration of additional characteristics and factors have been highlighted by this research as not the case. Service delivery in the public sector organisation multi-channel setting requires learning at an organisational level that represents the unique context of e-government service delivery.

9.1 Contributions to the field of information systems

Service management is an IS topic that continues to attract substantial scholarly interest in IS with most major IS conferences dedicating tracks to it. This research provides a link between the organisational behavior aspects of organisational learning and the IS research community.

This research also makes a contribution to knowledge in the understanding of the evolution of public sector ICT. Multi-channel service delivery systems are a complex mix of human factors, physical channels and virtual channels each of which can and frequently is mediated in some form by information technology. A

potential future stream of research is to examine how the managerial roles in the public sector that were examined in this study have changed and been influenced by social media since the data gathering of this study.

A further contribution to information systems research comes in the form of contributing to understanding of ICT innovation in public sector organisations by considering the ways in which PSO managers operationalise service related business processes. A potential future research dimension could be to try and tease out the differences and commonalities between PSO multi-channel service delivery and commercial multi-channel service delivery to determine the extent of the difference.

Another aspect of this research that is of interest to contemporary IS scholarship is in the area of data quality. The behavioral characteristics and operational consequences of information stewardship in the public sector illuminated by this research is an area that warrants further exploration by the IS research discipline.

Multi-channel service delivery systems in PSO's are current examples of complex inter-organisational systems that have an impact on the configuration of information infrastructures. This will become an IS research area of increasing importance as the need for more integration of government and private data emerges in the face of cloud based, managed services and common capability initiatives that characterise the current trend in transformational government.

In addition, this research has implications for information technology programme and project management research in IS. The research has highlighted the role that PSO managers play in configuring systems on an on-going basis. Traditional forms of project management that focused on capturing managers' requirements as a static point-in-time elicitation phase are challenged by this learning centric view of manager-driven systems conceptualisation. There is potential for future IS research into the implications of this viewpoint on project management practice and frameworks.

9.2 Limitations of the research

This section highlight the limitations attendant with this research reports findings and acknowledges the researchers bias.

Transferability – The researcher acknowledges that the results of the findings in this research are not necessarily directly transferable to other settings because of the context-specific nature of constructionist inquiry. However, the phenomenon and the attitudes and beliefs described by the research represent settings and situations that would be recognisable by other managers conversant with the New Zealand PSO service delivery setting. The intent of this research was to provide empirical findings in sufficiently rich detail that the research would ‘strike a familiar chord’ with managers and organisational leaders familiar with multi-channel SDS’s in New Zealand or in countries with a similar public administration.

Context –This research took place in a specific cultural, organisational and temporal context. The New Zealand government and its associated public service at the time of the research had a cultural makeup that was its own. Like any cross section of society, its norms, memes and stories are derived from the people that make it up at a given: a specific point in time, their shared history, and their interaction with wider society.

This research took place between 2008 and 2010. New Zealand society, the organisations, and the people involved in the research have already moved on, learned new things, built new systems, and reconfigured their organisations. As a consequence, the findings in this research are relevant only when situated in the context that they related to.

The managers – The attitudes beliefs and stories of the managers in the research reflect their personal views of how their organisations function. The mid-level managers in the research were not asked to speak for the whole organisation and their anonymity was assured. The constructionist paradigm used in this research recognises and allows for these multiple ‘voices’ to be reflected in the findings without judging any particular contribution as being more or less valuable than another.

Cultural background of the managers – Consistent with the constructionist paradigm, the wider cultural background of the managers was not explored within the scope of this research as it would be in an ideal constructivist approach.

It is the belief of the researcher that the position of recognising the ambient culture of the PSO's was sufficient to reflect the attitudes and beliefs of these managers in the setting being researched and that wider inquiry was not warranted or needed.

9.3 Building on the empirical findings

In response to the original research question; organisational learning does indeed have an important influence on service delivery information systems for the managers in this research. In the findings it has been illustrated that the managers of these public sector organisations had to have a well-developed understanding of organisational learning strategies; both for their peer and for service team communication. That understanding then enabled them to cultivate a sophisticated understanding of the service capacity expectations of their operational environment.

9.3.1 Organisational learning contributions to knowledge

Organisational learning was initially a nineteen sixties idea that became 'fashionable' in the nineteen nineties. However, learning never goes out of fashion. For this research, it has proved an extremely useful frame of reference to explore the understanding of how and why managers frame their operationalising of service delivery in the manner they do.

This research has demonstrated that in the organisational cases explored; where there was an effective organisational learning strategy, there was also an awareness of knowledge transfer mechanisms within PSO managers of multi-channel service delivery functions enhanced the ability of those managers to build successful systems. The managers did this through individualised and socialised knowledge transfer mechanisms.

As well as that, the research also illuminated that in the cases studied, a leadership understanding of the organisational learning requirements of service delivery managers who build multi-channel SDS's was required to deliver successful SDS's. That understanding was made up of: engaged leadership, managerial valuing of performance and its measurement; and demonstrable support for innovation at multiple levels in the organisation.

In addition, the vocabulary of organisational learning provided an important scaffold for the researching the organisational learning occurring amongst the service managers. It served to illustrate how the managers used their learning in an adaptive manner to constantly review service performance and align systems changes with organisational needs and goals.

A better understanding of the role of service capacity in multi-channel SDS's has emerged from these findings. The importance of the decoupling of service capacity in the pre-definition of service value that was speculated about in chapter three was found to indeed be an important aspect for managers learning about successful service delivery systems.

Service capacity was operationalised in the revised research lens by the inclusion of a systems alignment focus that when used in conjunction with the outcome-process focus enables organisational learning capability to be used to explore this important aspect of multi-channel service delivery.

9.3.2 Information management implications for knowledge

Information stewardship emerged as a clear theme in this research. A new research approach is required to understand how and why managers value the long term value of the data they look after.

This theme incorporates elements of information systems research, organisation culture and public policy research. There is an opportunity for future empirical research into this area of information management.

It is easy for organisations to devolve information systems design to systems analysts and technical architects. However, this research has illustrated that complicated overlapping delivery systems need to incorporate the learning of managers as designers and analysts in the systems development lifecycle.

In addition, requirements elicitation needs to incorporate complex learning, systems and social dimensions so that there was an opportunity for SDS design to incorporate social analysis techniques as well as techno-centric analysis.

The decision to adopt a constructionist methodological approach for this research has enabled the inherent complexity of the multi-channel SDS in PSO context to show through.

The use of this type of qualitative inquiry in information systems research is going to be even more relevant to future IS researchers as the social dimensions of complex systems define them in ways that techno-centric systems of the past did not do to the same extent. Future research into systems involving social media, and communities use will potentially benefit greatly from considering this methodology.

9.4 Benefits for practitioners from the findings

Complex service delivery systems are potentially an operational management issue for PSO leaders especially as multiple integrated channels become the normal service delivery model for e-government.

Managers can learn from these findings that organisational learning is a possible strategy for operationalising: environmental scanning, team skills development, stakeholder communications; and performance measurement and management.

In addition future practitioners who have multiple and complex stakeholder power-interest relationships can potentially use organisational learning and systems thinking strategy to develop SDS's that help service delivery teams to learn from the strategies used by the managers in this research such as satisficing and information stewardship.

This research has also provided examples of the importance of understanding the social and organisational context of a service delivery system in a holistic manner. These systems reflect the communities they serve and the organisational culture of the organisations that create them.

Managers and analysts can draw on the complex social contexts in the findings to understand the role of engaged leadership, championing of new ideas and the part that awareness of the social context of service delivery plays in service design

This research also illustrates to practitioners that learning about organisational learning can help them to understand where and when feedback mechanisms can assist in building understanding of their operational management practices.

Practitioners can also take away from this research that the PSO service delivery context is much more than commercial service delivery minus the profit motive. The PSO managers in this research were part of a culture that had its own rich and vibrant community with its own ethics, motives and ground rules.

On top of that, the managers in this research had different roles and responsibilities from their commercial equivalents. They were responsible for: legislated actions, meeting customer expectations-at times for customers who did not even want to be customers.

9.5 Concluding comments

This research has demonstrated that multi-channel service delivery in the New Zealand public sector is a work-in-progress that needs an on-going research agenda to assist these managers and their service delivery teams to maximise the benefits of their aspirations to improve public sector efficiency and effectiveness. As a result, the final model of this research forms a useful starting point for the next stage in that research agenda. In addition, the call for smaller more agile government has become louder.

Multi-channel service configurations are potentially a means for delivering on government calls for better, faster, cheaper public services. However, without a clear understanding of how new technologies are going to contribute to an already socially complex systems ecosystem it will be difficult for governments and public officials to know whether they are building-up or piling-up a deeper bureaucracy. This research has illustrated areas that need exploration to help develop that understanding.

This research has shown that service delivery operationalisation involves complex issues of systems management, multiple social dimensions, risk and change management, strategy and public policy. There is a clear opportunity for multi-disciplinary research into multi-channel public sector service delivery systems. To that end, this study, using a social constructionism paradigm, is contextually

relevant. It worked well for exploring the multi-channel SDS' characteristics in the New Zealand public sector at the time of the research. It is acknowledged that the setting and organisational culture has already moved on and changed.

A future research opportunity already exists to track the organisational learning progress in Multi-channel SDS since this research was carried out. The New Zealand public sector has changed in the light of a deepening recession in 2011. Public sector restructuring and demand for shared services and 'cloud based' service delivery has altered the service delivery context. In addition, there is also the potential to take this approach to other jurisdictions to explore what new dimensions and understanding that may emerge.

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Appendix A – Coding Schema

Code	Description
Climate of Openness	Facilitating factor
Concern for Measurement	Facilitating factor
Continuous Education	Facilitating factor
Dissemination Mode	Learning orientation
Documentation Mode	Learning orientation
Experimental Mind-set	Facilitating factor
ICT Experience	Background
Involved Leadership	Facilitating factor
Knowledge Sources	Learning orientation
Learning Focus	Learning orientation
Multiple Advocates	Facilitating factor
Operational Variety	Facilitating factor
Performance Gap	Facilitating factor
Product-Process Focus	Learning orientation
Role	Background
Scanning Imperative	Facilitating factor
SDS Experience	Background
Time in current role	Background
Formal Training	Background
Change Agents	Emerging theme
Technology Championing	Emerging theme
Info Stewardship	Emerging theme
Innovation	Emerging theme
Politics	Emerging theme
Stakeholders	Emerging theme
Technology Alignment	Emerging theme

Appendix B – Consent Form

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

SCHOOL OF INFORMATION MANAGEMENT Consent to Participate in Research

An investigation into organisational learning by public officials creating and maintaining multi-channel service delivery information systems in the New Zealand public sector.

I have been provided with and have understood an explanation of this research project. I have also had an opportunity to ask any questions about the research and have them answered to my satisfaction.

I understand that I may withdraw myself (or any information I have provided) from this project (prior to completion of the data collection and analysis) without having to provide any reason by e-mailing Allan Sylvester or his supervisor at the email addresses given below.

I understand that any information I provide will be kept confidential to the researcher and his supervisor, the published results will not use my name, and that no opinions will be attributed to me in any way that will identify me.

I also understand that the recording of interviews will be erased at the conclusion of the project unless I indicate that I would like them returned to me.

I understand that I may withdraw from the project at any time before [Date = Interview plus 45days], in which case any data I have provided will be deleted. Once data is transcribed and analyzed and the results incorporated with other participant's data, it will not be possible to delete it from the research.

[Please tick each box with a "√" to indicate your agreement]

- ☐ I agree to participate in this research.
- ☐ I agree to the interview being recorded.
- ☐ I would like the recordings of my interview returned to me 3 years after the conclusion of the project.
- ☐ I understand that any data I provide will be used for the purposes stated only.
- ☐ I would like to receive a summary of the results of this research project when it is completed.

Signed: _____

Name of participant: _____ Date: _____

Please feel free to contact Allan Sylvester or via email at allan.sylvester@vuw.ac.nz or his supervisor, Senior Lecturer Beverley Hope via email at beverley.hope@vuw.ac.nz for further information on the project or any informed consent concerns.

P.O. Box 600, Wellington, New Zealand Telephone +64-4-463 5384 Facsimile +64-4-463 5446

Appendix C – Table of Interviews

Pseudonym	Interview duration
Biggerville	
UM	86min
BM	58min
CM	56min
TL1	81min
TL2	46min
Smallerville	
CCM	81min
OPM	63min
CSS	75min
SM	49min
BigCol	
CCM	42min
LM	56min
TL1	35min
AM	61min
OSM	72min
BA	47min
SmallCol	
SEM	85min
AM	78min
LCM	60min
TechSci	
CSM	85min
TPM	43min
OSM	88min
DO	63min
SPM	78min
TSM	58min
TrackTech	
GM	87min
TL1	77min
TL2	65min
EBM	53min
BA	74min

Appendix D – HEC Consent

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

FCA HUMAN ETHICS COMMITTEE

Comments on Application for Human Ethics Approval

Date: **23 April 2008**

Re: ***Online and Multi-Channel Service Quality in the New Zealand Public Sector***

Principal Researcher: ***Allan Sylvester***

Supervisor (student research): ***Beverley Hope***

Ref No: ***IHEC SIM - 38 -2008***

Your HEC application has been reviewed and the Committee's decision is the following:

Application approved subject to the following minor change(s).

Human Ethics Approval valid until: (Date: *as in application* or *no more than 3 years*)

The committee requires the change(s) noted below, if these are acceptable you may begin immediately but you will need to send an updated application within one month. If the changes are not acceptable, please email the HEC Administrator detailing your objections. Note that the updated hard copy of your application needs to be signed by both you and your supervisor and should be sent to the HEC Administrator (Tiso Ross, EA121, School of Information Management, Kelburn Parade, Kelburn Campus).

Changes Required:

Handout page 4: 'How can you contribute'

After the entry under '**Informed Consent Form:**' please add the following sentence. *'This project has been approved by the VUW Ethics Committee.'*

Under the entry '**Your contribution is confidential:**' Please include that you have the permission of the organisation to conduct research and spell out the confidential nature of the report, the use of pseudonyms and other devices to protect the identity of the organisations. Also you should mention what is likely to happen to the finished thesis, for example that it will be deposited in the university library and may also be deposited in the university's electronic institutional repository, which will mean it is available on the Internet, and additionally could be copied in papers or articles

Rowena Cullen

Chair, Informatics Human Ethics Committee.

Appendix E - Participant Information Sheet

***Re: An investigation into organisational learning by public officials
creating and maintaining multi-channel service delivery information
systems in the New Zealand Public Sector***

Background of the research project

There is a growing body of evidence that suggests multi-channel organisations are often more successful than single channel configurations. However, merely adding channels without a clear strategic intent is not a guarantee of service delivery success. Indeed, increased channel choice can inhibit service quality. The creation of a successful delivery systems strategy is critical to ongoing online service success.

My scans of the current research lead me to conclude that organisations are often quite good at understanding the standards they are required to comply with. In addition, they frequently have a good appreciation of the best practice requirement that they need to have demonstrable competence in.

Where I believe there is a gap in the understanding of online multi-channel service delivery is in the cultural dynamics that underpin the key decisions that are made in service delivery systems design.

To produce a successful service delivery system a sound understanding of the cultural mechanics behind the service line of visibility is essential and three key elements of multi-channel service quality need to be integrated:

- physical channels (delivered by people)
- virtual channels (automated delivery)
- integration quality (cross channel information exchange).

The service literature emphasises that minimising customer contact time improves the chance of service success. So, providing more channel choices should not equate to making the customer work harder to achieve the same service levels they would have received via a single channel.

My research uses organisational learning as a framework for looking beyond the seemingly obvious reactions to situations and considers why and how managers, designers, and implementers build systems in the way they do.

I am hoping to identify new mechanisms that will encourage a deeper understanding of how personal learning and the learning of the wider organisation can be focused to bring about service delivery systems projects that deliver improved service quality.

Frontline managers have an important role to play in closing the service-performance gap. These managers are well positioned to evaluate service delivery performance first-hand and initiate change.

The purpose of the research is to accurately represent how participants approach learning about service delivery systems and how these participants influence the design and development of those systems

The Research Process

The research data are collected by means of participant interviews. Confidentiality of the participants and the organisation is assured and maintained throughout the research process. This research is conducted under the oversight of a Victoria University of Wellington human ethics committee. In addition, it is directly supervised by Professor Miriam Lips - chair of e-government and Dr Beverley Hope - senior lecturer, in the School of Information Management.

All data gathered from <<organisation>> staff would be aggregated with data from other government organisations and participants in such a way that no attribution of comments or identification of individuals will be possible in the final report. <<Organisation>> would only be referred to in a very abstract manner such as '*central gov't organisation A*'. References to applications or tasks that could identify the organisation would be similarly obfuscated.

Individual participants are encouraged to review the transcripts for accuracy before their data is aggregated into the body of the research. The research is concerned with the learning context of individuals working in particular service-oriented settings so reference to specific organizational attributes or applications is not required. <<Organisation>> management is welcome to view the draft thesis before it becomes a public document if requested.

Who can participate?

The ideal participants in this research are supervisors of customer contact activities both direct and electronically mediated – for example:

- Team leaders of web content editorial teams that represent client services.
- call centre supervisors
- business analysts or project managers developing customer service supporting applications
- Designers of back office processes that have a customer service impact.

The interview process:

The research consists of five to six interviews representing a cross section of the managers listed above - the process involves:

- No pre-interview preparation is required
- The interviews typically take 40-60 minutes
- Interview transcripts are provided to participants for confirmation and clarification – a response to transcripts is not required but is encouraged.

Appendix E – Participant Information Sheet

This research is reinforced by careful attention to planning, design, data analysis and methodological rigor.

Your participation in this study would contribute to a better understanding the nature of the service-oriented organizational culture that is a becoming an essential aspect of the New Zealand public sector. Furthermore, it will influence my teaching and thereby contribute to producing information professionals with an awareness of relevant issues facing the New Zealand public sector. <<Organisation>> has a significant number of Victoria University of Wellington graduates in its workforce.