

From product-centric to customer-centric services in a financial institution – exploring the organizational challenges of the transition process

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Abstract This research aims to contribute to an increased understanding of the strategic, cultural and other organizational challenges in a transition process from product-centric to customer-centric services. The paper describes an exploratory case study, conducted in a complex financial services organization in the context of their customer-facing services. The transition process was examined through the theoretical lens of Work System Theory (WST), following the argument made by previous researchers that service systems could be seen as work systems. This holistic theory enabled us to capture the three key phases of the transition process as work systems snapshots and through their evolving relationships show the manner in which the transitions occurred from one phase to another. This innovative approach provided the researchers with an in-depth insight into key issues related to organizational environment, strategy, customers, products and services, processes and activities, participants, and information and technologies – all relevant for each phase of the transition process. This research contributes to both information systems (IS) and service science research, bringing the key service research priority of “service infusion” to the attention of IS researchers.

Keywords Customer-centric services · Transition process from product to customer orientation · Work system theory · Organizational challenges · Case study research

1 Introduction

Service-oriented thinking is one of the fastest growing paradigms in today’s economy (Demirkan et al. 2008) with service-related research currently undertaken by many disciplines including, for example, information technology, marketing, operations and, increasingly information systems (Barrett et al. 2015; Song et al. 2015; Nguyen et al. 2015; Tang et al. 2015; Kim et al. 2015; Seethamraju 2015). However, as researchers continue their investigation into different aspects of service systems, their efforts and research contributions still remain in isolated disciplinary silos (Maglio and Spohrer 2008; Chesbrough and Spohrer 2006; Ostrom et al. 2010). One of the most important consequences of this silo approach to service research is the so-called “conceptual confusion” (Chesbrough and Spohrer 2006), best illustrated by the proliferation of different definitions of and assumptions about the fundamental concept of *service*. For example, information technology (IT) and information systems (IS) researchers often perceive *services* as *IT-enabled services*, while for example, the marketing research community see them as business services offered to customers. Furthermore, in the IS literature “assumptions about *service* are for the most part implicit, and the implications of ICTs for service innovation are generally not articulated in an explicit manner” (Barrett et al. 2015, p.141).

Yet, the reality of ever-increasing complexity of services and service systems calls for an integrated, multidisciplinary approach to service research, in particular service innovation (Bitner et al. 2010; Ostrom et al. 2010; Ostrom et al. 2015). This in turn creates a need for common foundations, including shared definitions and

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frameworks. As a starting point, we adopt Spohrer et al. (2007) definition of *service as the application of competence and knowledge to create value between its providers and receivers*. In essence, a service is a process, rather than a unit of output that can be consumed or produced (Lusch and Nambisan 2015).

Furthermore, service systems are defined as complex business and societal systems that create benefits for customers, providers and other stakeholders (Spohrer et al. 2011). They involve people, technology, organizations, as well as shared information including, for example, a shared language, laws, norms, shared models, measures etc. (Spohrer et al. 2007). Service systems engage in and focus on knowledge-based interactions to co-create knowledge (Bitner et al. 2010).

Looking from the IS perspective, service systems are complex socio-technical systems (Alter 2010a). As such they involve a dynamic configuration of people, technologies, organizations and shared information (IfM and IBM 2008). “The smallest service system centers on an individual as he or she interacts with others, and the largest service system comprises the global economy” (Maglio and Spohrer 2008, p.18).

The integrative view of service systems is consistent with the latest thinking and recent developments in the multidisciplinary field of Service Science. “*Service Science is an emerging discipline that focuses on fundamental science, models, theories and applications to drive innovation, competition, and quality of life through services(s)*” (Bitner et al. 2010, p. 228). Moreover, a recently published international study by Ostrom et al. (2015) identified twelve key research priorities for this emerging but fast growing field. Among them is the so-called “service infusion”, defined as “the process of adding customer-centered services ...to a product-centric business model” (Zeithaml et al. 2014, xiv, as cited by Ostrom et al. 2015, p.132). The challenge of “service infusion” goes beyond manufacturing (goods-based) companies and is equally relevant for service organizations, as they may still follow a product-centric approach to designing and delivering customer services.

Considering the research challenge of “service infusion”, our research focuses on the following broad research question: *How do service organizations transition from product-centric to customer-centric services?* Taking the *organizational* rather than the customer perspective, we aim to contribute to building an increased understanding of various strategic, cultural, as well as other organizational issues experienced throughout the transition process, especially those relating to technology.

This paper describes an exploratory research case study conducted in a complex financial organization in the context of their customer services. Using the theoretical lens of Work Systems Theory (WST) by Alter (1999; 2000; 2004; 2008; 2010a; 2013) and considering services as work systems, as recommended by Alter (2010a), we examined a complex transition process from *customer services structured around financial products* (i.e. product-centric services) to those *structured around customer needs* (i.e. customer-centric services).

Our research makes several contributions to IS research. First, we advance emergent IS thinking about the role of IS in service science research, as recently discussed by Barrett et al. (2015). More precisely, by examining a transition process from product-centric to customer-centric services through the IS lens (supported by WST), we “bring services and service innovation to the foreground”, as recommended by Barrett et al. (2015). By doing so, we expand the proposed list of four service research areas relevant for future IS research, as suggested by Barrett et al. (2015) to include the IT-enabled transition process from product-centric to customer-centric services – or “service infusion” as it is termed in the language of service science research.

Second, our research outcomes also contribute to the long-standing IS topic of “business/IT alignment”. Based on the insights obtained, we argue that this alignment is not static, as it is often considered to be in IS literature, but should be understood and managed as an evolving process. The same recommendation was recently made by Karpovsky and Galliers (2015) and Reynolds and Yetton (2015). We additionally propose to study this alignment process using the service perspective, rather than the less-comprehensive business process perspective, as previously recommended by Siurdyban (2014).

Furthermore, our research also contributes to the service science field. First, we bring an IS (WST) theory to service research and in this way expand the existing theoretical base for services and service innovation. Second, we contribute to the key service research priority of “service infusion” (Ostrom et al. 2015). More precisely, the adopted WST enabled us to gain a deeper insight into the inner working of the transition process (i.e. service infusion process), in particular complex relationships of different service components (organizational environment, strategy, customers, products and services, processes & activities, participants, information and technologies) as they evolved over time. By focusing on the organizational rather than the customer perspective, we also contribute to another key service research priority of “understanding organization and employee issues relevant to successful service”, also identified by Ostrom et al. (2015, p.127).

In terms of practical contribution, we offer insights and ideas to managers about how to analyze and manage the transition process using the WS framework, while bringing their attention to various organizational aspects. This is an important contribution, because when it comes to changing from product to service orientation, managers have very limited guidance in the research literature (Karpen et al. 2012).

The paper is organized as follows. The next section introduces related work and outlines the current thinking about service research as discussed by the IS community. This is followed by an introduction to the Work System Theory used as the theoretical lens for this research. After presenting the case organization and the research method, the paper proceeds to describe the main research findings, followed by a

discussion section that discusses our findings and also outlines our main research and practical contributions to the IS and service science fields. The final section describes conclusions, limitations and opportunities for future work.

2 Related Work

2.1 Service science

2.1.1 Transition process from product-orientation to service-orientation

Various aspects of the transition process from products to services have been explored in the manufacturing, engineering and management literature (Neely 2008; Baines et al. 2007; Vandermerwe and Rada 1988), under the term “servitization” (Rust and Miu 2006). For example, researchers from different disciplines are exploring motives, benefits and feasibility of servitization as a sustainable strategy (Smith et al. 2014) as well as the actual process of servitization (Oliva and Kallenberg 2003).

Furthermore, many researchers use the so-called S-D logic (service-dominant logic) by Vargo and Lusch (2008) as the predominant theoretical lens from which to explore the transition process from products (i.e. Product-dominant (P-D) logic), towards services (i.e. Service-dominant (S-D) logic). In fact, the S-D logic is widely seen to provide “just the right perspective, vocabulary, and assumptions on which to build a theory of service systems, their configurations, and their mode of interaction” (Maglio and Spohrer 2008, p.19). “It is a logic that is philosophically grounded in a commitment to collaborative processes with customers, partners and employees; a logic that challenges management at all levels to be of service to all the stakeholders” (Lusch et al. 2007, p.5).

However, it is also possible to observe that the transition process from product-orientation to service-orientation has been predominantly explored in the *manufacturing (goods) organizations*. In comparison, literature describing the transition process in service organizations- in particular the transition from *product-centric services* to *customer-centric services*- appears to be sparse. This is an important research gap “because the available research contributions highlight merely the industrial perspectives, with the focus on product, technology, efficiency and costs. Therefore, there is a risk of the traditional customer-oriented perspective of service research having to take back seat” (Straus 2008, p.67).

By focusing on the transition process from *product-centric* to *customer-centric services* in a service organization, we aim to address this important research gap. Instead of using the well-known S-D logic to observe the transition process, we propose to use the alternative theoretical lens of WST, as explained later in the paper. Our choice of WST over the

commonly used S-D logic (Vargo and Lusch 2004) was informed by the need to obtain a more comprehensive view of different service components and their evolving relationships that together made up the transition process under study.

2.1.2 Customer centrality

The second aspect of our work is related to the concept of “customer-centricity”, also known in the literature as customer-focus or customer-orientation. According to Shah et al. (2006) *customer centrality* refers to an organization’s customer focus achieved by, for example, customer segment centers, customer relationship managers, and sales teams for customer segments. It is often considered and conceptualized as either cultural or behavioral phenomenon (Gebauer and Friedli 2005). Customer centrality also emphasizes the increasing importance of customer satisfaction and loyalty (Gebauer and Kowalkowski 2012).

In spite of focusing on customers, many firms are still struggling to fully align themselves with the customer-centric paradigm (Shah et al. 2006). Prior research confirms that the main challenges are related to organizational culture, structures, processes and financial metrics (Shah et al. 2006). For example, it is necessary, yet very challenging for the employees to develop behavior competencies and adopt customer-focused attitudes in order to develop the so-called learning relationship with the customers (Ballantyne et al. 2011; Neu and Brown 2005). Furthermore, very recent research by Gountas et al. (2014) highlights the importance of understanding the effects of different aspects of service delivery on customer-centricity including for example, interpersonal support, job satisfaction and self-efficacy. When considering the complexity of changing towards customer-orientation, Homburg et al. (2000) argue that structural changes can be made relatively quickly, while the required changes to corporate culture and human resources take a very long time to implement.

The above discussion leads to two important insights, both related to our study. First, customer-centricity is a multi-faceted phenomenon that calls for a holistic understanding of customer services from several different perspectives and beyond their immediate context. Second, given the fact that customer-centricity takes time to develop, it is necessary to develop an understanding of the transition process *over time*. Both insights were used to inform our study including the adopted research method, as explained later in the paper.

2.1.3 Service climate

Our research of complex multi-faceted customer-focused services and the transition process towards them is also related to recent research on *service climate* (Bowen and Schneider

2014). According to Schneider et al. (1998) the concept of service climate refers to employees' shared sense of service quality as stated in relevant policies, practices and procedures, as well as the service quality they observe in *behaviors* that are expected, supported and rewarded. As reported by Bowen and Schneider (2014) on the basis of their synthesis of prior research, the service climate theory and practice emphasize that these employee experiences are reflected in all aspects of service quality as perceived by customers, including customer reports on service quality, customer satisfaction, customer loyalty and indirectly, in the firm's market value. The same researchers proposed a 'service climate framework' that links the known antecedents of service climate for those that serve customers - including leadership issues, human resource management practices and systems support (e.g. operations, marketing and IT) - with the important organizational consequences of service climate as reflected in customer experiences, such as quality, satisfaction and loyalty.

It is important to note that the concept of service climate is related to the organizational (internal) perspective, rather than the external perspective. This is the same perspective we adopt in our research, as we focus on the internal working of the transition process rather than on customers' perceptions of it, as is done for example, in marketing research. Also by taking a holistic, multi-perspective view of the organizational context of a customer-centric service under investigation and by considering its outcomes (both intended and achieved), we aim to contribute to a better understanding of different aspects of service climate that provides context for the transition process from product to customer orientation.

2.2 Information systems

2.2.1 Service thinking in information systems

Although not explicitly focused on services in the way they are defined and researched in service science research (Barrett et al. 2015), the IS field has already made numerous contributions to ICT-enabled service innovation. For example, based on their comprehensive review of IS literature, Barrett et al. (2015) provide an excellent overview of the relevant IS research streams with important implication for service research, in particular service innovation as currently considered by the service science research community. However, they also point out that IS research publications, although related to services, still discuss service and service innovation notionally and with underlying "assumptions about service being for the most part implicit" (Barrett et al. 2015, p.141). Notable exceptions include recent work by Lusch and Nambisan (2015); Orlikowski and Scott (2015); Srivastava and Shainesh (2015) and Eaton et al. (2015).

Aiming to bring services and service innovation to the foreground, in order to inform future IS research about the latest scholarship in service science research, Barrett et al. (2015) identify four areas where the IS perspective is particularly needed. These include: "the application of S-D logic to service innovation, insights from practice theory-based developments on service, theorization of the role of digital artifacts and innovation for service innovation, and exploration of service innovations from emerging economies" (ibid, p.148).

Our research also brings services and service innovation to the foreground and uses an IS theory to investigate one of the key service science research challenges - "service infusion" (Ostrom et al. 2015) - by focusing on a transition process from services organized around products (i.e. product-centric) to those organized around customer needs (i.e. customer-centric). Furthermore, by treating services as socio-technical systems, as suggested by Alter (2010b) we analyze the transition process from the IS perspective, looking at interrelationships among different service components over time. By doing so, we extend the proposed list of service research areas relevant for IS researchers, as identified by Barrett et al. (2015) to include the IT-enabled transition process from products to services ("service infusion").

2.2.2 IT/business alignment

Looking from the IS perspective, our research on the transition process from product-centric to customer-centric services is also related to the long-standing challenge of IT/business alignment, or more specifically IT/strategy alignment, for several reasons. First, customer services (both product-centric and customer-centric) in complex service organizations are enabled by IT systems. Second, the transition process from one type of service to another is also of strategic importance, and is often (if not always) triggered by decisions made at the strategic, rather than the IT level.

The main focus of the IT/business alignment literature is on the research and practical challenges of ensuring that IT activities are performed in accordance with the business needs (Chan and Reich 2007). Being a very mature area of IS research and practice, IT/business alignment offers many prominent examples of relevant prior studies. For example, researchers such as Luftman et al. (1999); Fonstad and Subramani (2009); De Haes and Van Grembergen (2009) identified important factors that drive or inhibit alignment. Henderson and Venkatraman (1999) studied strategic alignment by looking at patterns of interactions between internally and externally oriented perspectives of IT and business. Other exemplary studies focused on different aspects of productive relationships between IT and business, including communication channels, the alignment of business and IT strategies, appropriate governance structure, the establishment of common goals and development of shared understanding (Mehta

and Hirschheim 2007; Palmer and Markus 2000; Chan 2002; Johnson and Lederer 2005; Benbya and McKelvey 2006; van Grembergen and De Haes 2009).

Compared to the current IS research on IT/business alignment that “implicitly assumes that IT strategy is aligned with a single business strategy” (Reynolds and Yetton 2015, p.101), we study a transition process from *one* strategy (product-centric) to *another* (customer-centric). Within this process, we aim to develop a better understanding of different forms and phases of alignment of these strategies with technology. Furthermore, in comparison to previous work by Siurdyban (2014), we study IT/business alignment from the service rather than the business process (BP) perspective. The proposed service perspective is envisaged to offer a more comprehensive perspective than the BP one, because services are “process and experienced based” (Bitner et al. 2007) and as such are inclusive of, but wider than BPs. The following section introduces the foundation theory used in our research.

3 Foundation theory

3.1 An overview of work system theory

Work System Theory (WST) by Alter (Alter 2013; Alter 2010b, Alter 2008, Alter 2006, Alter 2004, Alter 2002, Alter 2000, Alter 1999) is aimed at bridging a gap between research and practice by helping business professionals attain a good understanding of a work system how well it performs, and how it might be improved (Alter 1999, p.3). “A work system is a system in which human participants and/or machines perform work using information, technology and other resources to produce products and/or services for internal or external customers” (Alter 2008, p. 451). The examples considered in the literature include projects, supply-chain, e-commerce websites, loan approval (Alter 2004, 2008), and in more recent times, *service systems* (Alter 2010a). Furthermore, Alter (2008) argues that in order to develop even a rudimentary understanding of a work system (WS) through empirical research it is necessary to acquire knowledge of the customers, products and services, processes and activities, information and technologies as well as WS participants (Alter 2008).

The work system framework “identifies nine elements that are part of even a rudimentary understanding of a work system” (Alter 2008, p. 465). Figure 1 shows a WS framework with arrows depicting various links through which a change in one element can affect the other elements. As such, they do not represent data flows. The framework provides a visual representation of what is essentially a static view of a work system’s form and function during a particular time

period. The main elements of WS framework are summarized in Table 1.

Overall, the work system framework provides “an outline for describing the system being studied, identifying problems and opportunities, describing possible changes and tracing how these changes might affect other parts of the work system” (Alter 2008, p. 465). Application of the work system framework to a particular situation is called a work system snapshot.

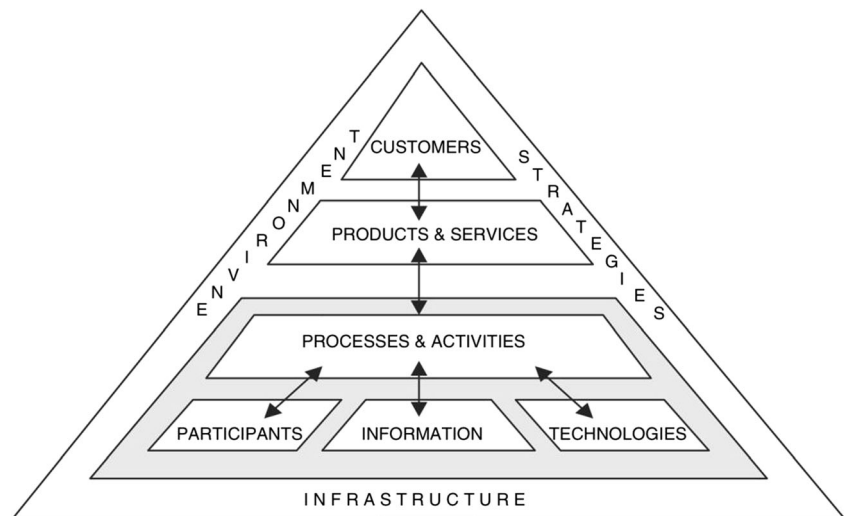
Alter (2013) positions WST as a theory for *analysis and explanation* of a given situation (Gregor 2006) and offers a very comprehensive comparison of WST with other well known IS theories including actor-network theory, theory of organizational routines, activity theory, socio-technical and general system theory. WST can be also understood in relation to many important topics in IS research and practice, including diffusion of innovation, adoption of technology, organizational routines, IS analysis and design, project management and business processes (Alter 2013). Most importantly for our research, WST can be used to guide our understanding of planned and unforeseen “changes that emerge from interactions of system components, adaptations and workarounds, and the environment” (Alter 2013, p.117).

Looking from the technical (IT) perspective, WST provides a link between services, service systems and service-oriented architecture/enterprise (SOE). According to Alter (2012) this link is very much needed by any organization wanting to adopt service orientation at all levels (from business to technology) because the current SOE research does not offer enough guidance as it is still focused on issues related to software and network architecture.

The WS framework could also be related to other high-level conceptual models and frameworks used to analyze systems in organizations including for example, Enterprise Architecture (EA) frameworks. EA is “the definition and representation of a high-level view of an enterprise’s business processes and IT systems, their interrelationships, and the extent to which these processes and systems are shared by different parts of the enterprise” (Tamm et al. 2011, p.142). However, compared to EA frameworks, such as the well-known Zachman’s (2008), a WS framework is aimed at a different conceptual level, as argued by Alter (2010c).

Finally, WST and its central concept – work system – have been previously tested and adopted in numerous research and practical projects. For a very extensive list of these projects, see Alter (2010c) and Alter (2013). It is important to note that most, if not all of them are in the IS field. In this project we cross the boundaries of the related, but still segregated fields of IS and service science research, by proposing to adopt WST as a foundation theory for an important research challenge that was first observed in service science research.

Fig. 1 The Work system framework by alter (2008)



3.2 Relevance of WST for our research

According to Alter “a service system is a work system that produces services for customers” (Alter 2010a, p. 202). Most importantly for our research, the work system perspective applies to all types of services including customer services (Alter 2008, p.72). This particular insight inspired the initial idea to study services and the transition process from one type of service to another through the WST lens.

Furthermore, given the inter-disciplinary nature of our research, we needed a theoretical lens that would act as a shared perspective i.e. boundary object (Carlile 2004) among different disciplines – IS and service science research. For example,

while S-D logic is well known among service science researchers from the marketing and to some extent, general business background, it is not commonly used by IS researchers (Barrett et al. 2015). On the other hand, various service-oriented architecture frameworks, although very useful, are all well understood and widely used by the IT, computer science and to some extent IS researchers, but are not suitable for business researchers. Consequently, we adopted WST because it: i) provides a common denominator for talking about services from different disciplinary perspectives and ii) facilitates a synergy between different ways of looking at systems such as business, both technical and functional (e.g. marketing, operational) (Alter 2008).

Table 1 The main elements of a WS framework (Alter 2010b, 2008)

CUSTOMERS – the main purpose of the work system is to produce products and services for customers. Thus, customers (internal and external) are the recipients of a work system’s outcomes.
PRODUCT AND SERVICES – they consist of information, physical things, and/or actions produced by a work system for the benefit or use of its customers.
PROCESSES AND ACTIVITIES – they occur within the work system to produce products and services. There must be at least one activity. Also, it is important to note that work being performed may not involve a set of clearly predefined and specified steps with their beginning, sequential flow, and end being well defined. Thus work systems could include activities and processes that rely heavily on human judgment and improvisation.
PARTICIPANTS - these are people who perform work within the work system, including both users and non-users of IT.
INFORMATION – All work systems use or create information that in this context is expressed as the so-called informational entities that are used, created, captured, stored, transmitted, deleted, manipulated, updated, and/or displayed by processes and activities. Examples include orders, invoices, job descriptions, medical histories, job offers, etc. Informational entities could be of different granularity and could contain or be contained by other entities, for example, an order containing a line item.
TECHNOLOGY – this component includes both tools that are used by work system participants and automated agents performing automated activities.
ENVIRONMENT – this component includes the relevant organizational, cultural, competitive, technical, regulatory, and even democratic environment within which the work system operates and that affect its efficiency and effectiveness. Examples of organizational aspects include stakeholders, policies and procedures as well as organizational history, culture and politics.
INFRASTRUCTURE – This component includes the relevant human, information, and technical resources that are used by the work system but are shared by other work systems and managed outside of it. The infrastructure component is sub-divided into information infrastructure, technical infrastructure and human infrastructure.
STRATEGIES – The relevant strategies for each work system include <i>enterprise strategy</i> , <i>organizational strategy</i> and <i>work system strategy</i> . The work system strategy should support organizational and enterprise strategies and all three should be in alignment.

Finally, when used as a theory for analysis and explanation (Gregor 2006), WST is envisaged to provide a better understanding of the IS challenge of IT/Business alignment from the service perspective, as intended by our research. “Greater emphasis on work systems is appropriate because the relationship between work system performance and business results is much more direct than the relationship between IT and business results” (Alter 2013, p.100).

4 Research context: case organization

The case organization selected for this research is a large financial institution here named the NSW Bank (pseudonym). This bank is one of the four leading banks in Australia employing tens of thousands of people and with branches throughout the Pacific region. The NSW Bank also maintains offices in key financial centers around the world.

The bank has global assets of a few hundred billion dollars and ranks in the top 10 listed Australian companies by market capitalization, with several million customers. The bank’s operations are comprised of five key business areas namely: Retail & Business Banking (RBB), Financial Group (FG), Institutional Banking (IB), NZ Retail Bank (NZR) and Australasia Banking (AB). These five divisions are in direct contact with customers and were considered revenue generators.

Furthermore, all key operations are supported by the back office (BO) known as a Core Business Support (CBS). The BO operates the complete information technology division; supports and develops software systems; provides infrastructure support for cash management, loan applications, fraud and anti-money laundering and security; and performs records management. The BO also develops, implements, and manages major projects and controls outsourced services by liaising with the outsourcing partners on behalf of the bank. The BO plays a pivotal role in developing the critical capabilities of the bank through strategic project execution and day-to-day delivery of core process outcomes.

After many years of focusing on competing through financial products, the NSW Bank adopted a new strategy focusing on customer-centric services, because they believed that this would create a more sustainable competitive advantage. As a result, the organization started transitioning from *product-centric* to *customer-centric* services. Hence, we chose this organization for our study to gain an in-depth understanding of their transition process. Within this context, the main focus of our work was the NSW Bank’s flagship customer-centric service known as “One point contact” and the transition process towards it. This core service will be explained in more detail in the findings section. The next section introduces our research methodology.

5 Research methodology

In this project, we adopted an exploratory case study research judged to be the most appropriate for our research because “the research topic is new and the published research is still emerging” (Myers 2009). Case study is an ideal methodology when a holistic, in-depth investigation is needed (Feagin et al. 1991) and reality is perceived as socially constructed, rather than objectively determined (Amaratunga and Baldry 2001). Adopting such an approach for this study offered us an opportunity to understand what happened in the NSW Bank through the meanings that people (in the Bank) assigned to them (Deetz 1996).

Prior research also recommends case study research as an appropriate method for service systems – in particular, their organizational aspects. According to Ostrom et al. (2010, p. 13):

“Case histories are a recommended method for understanding and adopting a service mind-set because doing so requires changing deeply held values, beliefs, and assumptions about the way things work. Changing employee reward systems may soon lead to new service-oriented behaviors, but it does not guarantee an authentic change in the deeper cultural mind-set that is truly sustainable”.

We assume that “access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meaning and instruments” (Myers 2009). We focus on the meaning with the context being socially constructed and seek what is a subjective understanding of the conditions, practices and consequences of social action, as expressed by the stakeholders in their particular social context (Mason 2002).

Therefore, what we call our data are really our own constructions of other people’s constructions of what they and their colleagues are doing (Geertz 1973, p.9). We as researchers are the measuring instruments and our understanding has been derived from our personal experience learned from theory rather than from manipulating variables (Szmigin and Foxall 2000). Thus, we have tried to grasp the ‘meanings’ of research participants’ thinking and behavior.

Data was collected through ‘field research’ since we as investigators, immersed ourselves in the Bank context to witness naturally occurring events and gain a firsthand knowledge of the situation (Singleton and Straits 2005). We were ‘outside researchers’ or ‘neutral observers’ who carried out the study simply by collecting data and had no involvement in action in the field (NSW Bank) or in providing feedback to participants (Walsham 2006).

Since this is a case study research, we designed our study to bring out the details by using multiple sources of evidence. As

per Hammersley (1989) our ‘case study’ data is a collection of detailed, relatively unstructured information from a range of sources about the NSW Bank and includes the accounts of subjects themselves. Hence, we collected information from the NSW Bank’s Annual reports and Sustainability Impact Reports for all phases of the transition process as well as other internal documents such as strategy reports, employee newsletters and external documents, such as “one point contact” commitment reports.

We also conducted interviews with 14 executives and 45 employees of the BO. The interviews started with a brief introduction for the purpose of the study and data required. The interviewees were assured of confidentiality and anonymity. The questions to executives were open-ended and revolved around the strategy of the bank; strategically important resources of the BO; challenges faced by the BO in implementing ‘one point customer strategy’; and their individual role in development of important resources. The employees were asked to *narrate stories* on their work life experiences within the bank and how work usually gets done at the bank. We used stories to collect information from employees as we believed that storytelling could be useful for explaining strategy, managing change and engaging employees in contemporary organizations (Cuganesan and Dumay 2009). The stories enabled us to cover a broad topic area that allowed employees the freedom to choose any work experience they remembered.

We observed that employees usually told stories that focused on themselves and described organizational activities that had a direct effect on them personally or their family. This process of story collection (both good and bad experiences) also stimulated stories around the manner in which the transition process affected an individual employee’s work life. No leading questions were asked and the interviews were informal, building a rapport with the respondent. However, probing questions were asked during the process to access more information.

We performed data analysis by methodically identifying themes and building ideas guided by WST. Thus, we used WST to provide “an explanation of “what is, how, why, when and where” (Gregor 2006, p. 620). When used in this way, the theory does not aim to predict, and consequently, there are no testable propositions being used in our research. Instead, we were able to “reconstruct” a picture of a fuller account of the connections between events and experiences. By combining data collected from interviews and the documents, we were able to offer an account of the Bank that transcends the individual voices of the participants (Llewellyn 1999). By doing so we inferred that the transformation process of NSW Bank could be divided into three distinct phases that we captured by the corresponding work system snapshots. These phases will be elaborated upon in our findings section.

As a qualitative case study, our research involved a large number of documents and interview transcripts, which had to be managed, kept track of and coded methodically. Since we needed an efficient, consistent and systematic data management system, we opted to use NVivo software. All documents and transcripts were imported into the software, which was later used for coding the documents according to themes as prescribed by WST. The use of NVivo software helped in making the study reliable and robust, enhancing transparency and allowing the quality of the evidence to be judged (Crowley et al. 2002). Table 2 provides a summary of the adopted research method including the details of the data collection and analysis.

It is also important to acknowledge the method’s limitations and explain how these were managed within the project. “Most of IS phenomena are not amenable to observation so they need to be examined through the reflective accounts of people involved (e.g. via an interview). This means that the researchers are acquiring people’s reconstructions of the phenomena studied.” (Cecez-Kezmanovic 2011, p.8). To ensure that the interpretations made were appropriate for the given context we sought feedback and corroborated different sources and the actual data collected. The following section presents our research findings.

6 Findings

This section describes the complexities that the NSW Bank faced during their gradual and very challenging transition process from product-centric to customer-centric services. This process was captured by three work system snapshots corresponding to its three main phases spanning a period of almost four years. Phase 1 corresponds to the NSW Bank’s initial stages of transition towards customer-centric orientation. Phase 2 captures the challenges that NSW Bank was facing

Table 2 Details of data collection methods, objectives and implementation

Data Collection Method	Implementation
Primary data:	14 executives (semi-structured interviews)
- Interviews	45 employees involved in WS implementation (employees' narratives)
	Duration: average 1.00–1.5 h (per interview)
Secondary data	Documents published during 4 years of the transition process:
- Internal documents	- NSW Bank’s Annual reports - Sustainability Impact reports - Strategy reports - Employee newsletters
- External documents	- One-point contact commitment reports - Industry press

when trying to implement customer-centric services within a service organization that remained product-centric in terms of its culture, technology, processes, and information. Phase 3 illustrates a turning point that enabled NSW Bank to start moving towards a customer-centric orientation, in spite of the challenges identified in phase 2 still remaining in place.

6.1 Phase 1: A work system snapshot 1

The NSW Bank's vision, mission, values, strategy and key objectives were communicated to stakeholders by way of the 'NSW Bank DNA' strategy model contained in their annual reports. According to these reports, the bank had a vision to be a great Australasian company as judged by customers, staff, shareholders and the broader community, by helping people achieve their financial aspirations. Their main strategy was *customer-centric* and their mission was to be number one for customer service in the banking industry. The annual reports specified that the business strategy of the bank was focused on superior execution through outstanding leadership, committed people, quality processes and embedded values. The bank trusted that they could deliver value across their business through the so-called *service-profit chain* that could be established through the relationship between internal practices and employee commitment, customer satisfaction and loyalty, profitability and value creation.

Based on their 'service-profit chain model', the NSW Bank's senior managers trusted that there was a direct link between superior customer service and sustainable profit growth. Therefore, in order to achieve superior service the bank intended to develop a 'high performance organizational culture' built around quality people, effective management processes and strong shared values. Based on their service-focused strategy the bank then launched a new service system called '*One point contact*' and decided to start *focusing more on the needs of their customers rather than products*, which was the case before. This core service system and its context were taken to represent the focus of Work System for our research.

Furthermore, the senior managers believed that this new service system reflected the expectations of their customers. The 'One point contact' was a commitment from the bank to the customers that they would provide an appropriate answer (solution) within the shortest time possible and without passing a customer around from one "touch point" to another. Also, the NSW Bank committed to monitoring their progress using a customer experience tracker survey, and to publishing an external progress report on a regular basis. Thus, the bank believed that they could create long-term shareholder value by committing to provide superior services to their customers and by adhering to this commitment.

In order to aid and monitor their new customer focused strategy, the bank proposed to concentrate on the different

elements of the 'service-profit chain'. This had an effect on the way processes were conducted at the NSW Bank that led to two important changes, as depicted in Table 2. First, it was decided to provide training to the bank's employees (WS participants) to be able to deliver the 'One point contact' service system. The idea was to invest in training relevant employees along the value chain to be organized around the needs of their customers and to develop their customer contact skills so that they could effectively serve customers at the first point of contact. Second, it was decided to automate their business processes to enable customer-facing employees (i.e. WS participants) to have immediate access to information about the customer in order to deliver the 'one point contact' service system. Also, the bank decided to offer fully automated, customer self-service, available 24 hours per day, 7 days per week, with an assumption that this would help improve the overall customer experience and, in turn increase their loyalty to the bank. Table 2 offers a snapshot of all WS components during Phase 1 of the transition process.

6.2 Phase 2: Work system snapshot 2

While the organizational strategy and the WS strategy were intended to be the same, in the second phase it became apparent that these two strategies were in direct conflict, as reported by the interviewees. The organizational strategy continued to focus on the big picture of customer satisfaction and high performance culture, while the work system strategy focused on the very different objectives of cost cutting and economization, taking a short-term view.

The misalignment between these two strategies could be found in their BP automation. For instance, when they had to decide and prioritize what to automate, guided by the principles of the customer-centric strategy, they preferred to automate BPs that were expected to result in improved customer service and consequently customer satisfaction. This could not be done since it required large financial investments, because the underlying IT infrastructure was designed around "silo" products. Instead, they decided to automate BPs that were focused on particular products because of financial constraints. Also, it was very difficult for the bank to transform their existing product-centric legacy infrastructure to a new infrastructure designed to support customer-centricity, as systems and data had to be integrated across product silos.

Furthermore, they could not find the right mix of automation and human intervention that would enhance customer experience. This required the NSW Bank to shift from routine to knowledge work, yet they had problems in transitioning their employees from routine transactional process workers to knowledge workers. They also had difficulty in shifting their employees' mindset from product to a customer centric culture. To add to these problems, they were not able to attract, engage with, and retain a qualified knowledge workforce.

In this manner, the shift in the strategy as stated in documents but not implemented in reality, resulted in disorientation within the Bank. This was also fuelled by the prolonged time taken for the implementation of the ‘One point contact’ service system. All these issues are captured by the work system snapshot shown in Table 3.

6.3 Phase 3 - work system snapshot 3

All the challenges identified in phase 2 were still present in phase 3. In spite of the problems faced by NSW Bank due to the misalignment between the overall organizational strategy and the specific work system strategy, they started to move towards customer needs (i.e. customer-centric processes). The reason for this could be found in the changes that occurred in three work system components, namely, WS environment (organizational culture), WS participants and WS customers. The key lever for service orientation was found to be in community volunteering opportunities that resulted in gradual changes in organizational culture (as reported by the interviewees). This in turn resulted in increased loyalty of employees (WS participants) that over time also started to impact customer loyalty. Work system snapshot 3 shown by Table 4 captures the reported change in the relevant WS components. The following section focuses on the overall transition process incorporating all three phases (Table 5).

7 Discussion

The previous section offered *static* snapshots of individual phases of the transition process from product-centric to customer-centric services. As such, it identified and described the individual WS components, as observed and interpreted by the researchers. To further improve our understanding of the overall process and describe its evolving nature, it was necessary to capture a *dynamic* interplay of relevant WS elements across the three phases. For this purpose, we invented simple diagrams, not originally included in the WST, as shown by the following three figures.

Thus, Fig. 2 depicts the implementation process of the ‘One-point contact’ WS during phase 1. It illustrates the NSW bank’s focus on two key elements: i) training the employees, (shown as *WS: Participants*) to embrace high performance culture (shown as *WS: Environment*), and ii) automation of service-oriented processes (shown as *WS: Processes and activities and Technology*). This was expected by the management to result in improved employee productivity.

A key component of the strategy of the Bank is customer service model which is built on three cornerstones: having a deep understanding of customers and their

needs; providing value-added solutions; and building long-term relationships with customers (SIR, 2005 p. 4).

The combined effect of a high performance culture and improved productivity was then expected to result in improved customer satisfaction and loyalty (shown as *WS: Customers*) that over-time would translate into a more sustainable competitive advantage.

Figure 3, which illustrates Phase 2 of the transition process, captures the tension between the long-term customer-focused organizational strategy and the reality of short-term WS strategy. While the organizational strategy was focusing on improved employee performance through training and automation of customer-focused processes in order to achieve the ‘One point contact’, the actual WS used for its implementation focused on short-term financial goals and budget restrictions. This mismatch affected employees (*WS: Participants*) and business processes (*WS: Processes and activities*) in numerous ways. For example, due to budget constraints parts of their work were outsourced.

Because then when you outsource to cut cost you have trouble, because you’ve actually outsourced some knowledge that you actually didn’t know you depended upon. And the outsourcer won’t duplicate that, because that was knowledge unique to our Bank. (Bruce, Head of Operations).

Employees were then made redundant in order to divert the savings made towards automation.

Yes I’ve seen many examples of hundreds of people being retrenched. The unexpected circumstances I guess driven by the need for organizational restructure or the need to drive down costs, but not in relation to the poor performance of that individual. (Bill, loans application team).

Existing employees were sent to training courses, while the newly automated applications were still being developed.

Because they’ve got this new system, and most of us think, I don’t know why they’ve brought it up in the first place, it’s called P...o. Just think at the beginning you’d start off training with one team, and they had so much of up and down, up and down, we eventually, they tell us not to ring the team up, but we have to because we can’t understand what they’re saying, their little jargons. (Richard, collections team).

This process resulted in a sub-standard training. The short-term financial focus of the observed WS also resulted in automation of BPs that were more suitable for product-centric

Table 3 Work System Snapshot - Phase 1

Work system components	Phase 1: Implementation of WS Components at NSW Bank
STRATEGIES	<ul style="list-style-type: none"> - <i>Organizational strategy</i>: Guided by the following three principles: <ol style="list-style-type: none"> 1. Deeply understand needs of customers 2. Provide value-adding solutions 3. Build long-term relationships (suppliers, customers, community etc)
<ul style="list-style-type: none"> - Enterprise, - Organizational - WS strategy) 	<p>Design of the <i>One-point contact</i> WS was a direct outcome of NSW Bank’s strategy implementation.</p> <p><i>“A key component of the strategy of NSW Bank customer service model which is built on three cornerstones: having a deep understanding of customers and their needs; providing value-added solutions; and building long-term relationships with customers” (SIR, Year 1, p. 4)</i></p>
ENVIRONMENT	<ul style="list-style-type: none"> - <i>Competitive environment</i>: NSW Bank operates in a highly competitive industry with the main focus so far on increased efficiency. - <i>Regulatory environment</i> – Financial industry is a highly regulated industry - <i>Organizational environment</i>: NSW Bank has many sub-divisions, numerous branches and departments - <i>Cultural environment</i>: Commitment to “High-performance culture” declared. - <i>Technical environment</i>: A high-level of business process automation <p><i>“We have increased our number of branches from 813 to 819. Furthermore, we currently have 259 branches accessible for people with a disability...ABC Bank continues to expand the number of Talking ATMs for the visually impaired, with currently 128 operating” (One Point Contact Commitments. Our customer charter, Year 1, p. 5)</i></p>
INFORMATION	<ul style="list-style-type: none"> - NSW Bank’s goal was to have a highly integrated customer information providing a 360° view (“single version of truth”) of a customer. - At the time this WS snapshot was taken, customer information was more “product centric” i.e. arranged around Bank’s product and as such, organized around information silos. - Consequently, customers were redirected around and were asked to provide the same basic personal information at every single touch point. - None of the customer facing officers would take responsibility for a customer-related decision, because they did not have access to all information that could help them provide solution to a customer’s problem/request. - Consequently, for every problem/request they had, the customer had to wait for some “miraculous” solution from the Bank, as suggested by an employee. <p><i>“One of the challenges... [is] essentially having a legacy of being a product oriented organization and having layers and layers of process and technology of different vintages. It just makes it really difficult to even do the basics. So that’s a huge challenge there that we absolutely need to keep away from customers. But it’s a huge challenge for us to get it right, day in and day out, gradually try to simplify that and make it more customer-focused, rather than bank internal process focused.” (Rob, Head of Consumer Banking)</i></p> <p><i>“I guess it’s just having run a model that was quite different for a number of years, we have been on the customer focused journey since... the late 90’s. And it’s a very easy thing to say, and if you have been running your business for however many years around product P&L’s, to swap to customer profit and loss is a huge underlying systemic change. And I do not just mean that in systems, I mean in the way you manage and focus, and everyone up to the way we structure our business”. (John, Head of strategy)</i></p>
CUSTOMERS	<ul style="list-style-type: none"> - The WS had two different types of customers – internal and external. - However, when considering WS’ benefits, NSW Bank was focused on the benefits of external customers.
PARTICIPANTS	<ul style="list-style-type: none"> - The main participants of this WS included all bank officers in-charge of all back-end activities as well as the customer-facing (front office) officers.
PRODUCTS and SERVICES	<ul style="list-style-type: none"> - This WS component includes the bank’s financial products and services such as home loans, personal loans, business loans, ATMs, internet services, personal banking products, credit cards etc.
BUSINESS PROCESSES	<ul style="list-style-type: none"> - The Bank’s focus on improved efficiency resulted in fully automated business processes (BP) around all product lines. - However, in spite of a very high level of BP automation, process coordination was not automated. Consequently, customer had no choice but to assume the role of “BP coordinator” – i.e. coordinate the activities at different touch points to get their own solution. - The one point contact WS was introduced with an objective to reduce the waiting time for customers by providing them with a solution at the first point of contact. <p><i>“A combination of systems and processes are involved in our day-to-day customer support activities...it is not always easy to ensure these are fully integrated and that our people have the confidence to use them to their full potential” (Ask Once Commitments. Our customer charter, Y1, p. 15)</i></p>
TECHNOLOGY	<p>This WS component comprised of process automation technology including work flow systems and repositories of customer data from different product lines.</p> <p><i>“Come later on this year, there’s a project going on in terms of our technology; they are spending millions on upgrading our technology. This is supposed to help us get information of any customer from anywhere in Australia.”(Silvia, Customer service officer)</i></p>
INFRASTRUCTURE	<p>This component included:</p> <ul style="list-style-type: none"> - Outsourced IT services, - HR in charge of training and - Shared databases and networking infrastructure

Table 3 (continued)

Work system components	Phase 1: Implementation of WS Components at NSW Bank
	<p>all supporting bank's day-to-day activities.</p> <p><i>"I do not think there'd be many major companies in Australia that would have as large a proportion of outsourcing. So we are probably, it's what about 25 % of our expense base, so it's significant. (Brett, Head of Outsourcing)"</i></p> <p><i>"We are a high-performance culture, so you know that no matter what role you go into you are going to have objectives to meet. You will expect to be shown or trained on how to achieve those objectives."(Jade, Head of HR)</i></p>

services rather than fully integrated customer-centric services. This was because the Bank was experienced with product-centric BPs and therefore could predict the outcome and quantify the results of process automation in financial terms. Processes needed to support the customer-centric services were more knowledge-intensive and yet to be developed. Therefore from their point of view such a development was unpredictable (i.e. hard to quantify) making it difficult to justify any additional investment.

Currently we're trying to establish something within Collections, so it's a new voice technology. So many people are up in arms saying oh no, no, it's not going to work, we don't know if it's going to work...in the Australian market.... No one has ever done it for an outgoing call before, not within Australia.... and it's a great bit of technology, and we were just about to roll it out, and then I a whole heap of people came out of the woodwork and said, no, no one's ever done it before, we don't know how people are going to react...so we stick on to what is predictable (Jill, Collections team).

In combination, all these factors had negative effects on customer satisfaction and consequently customer loyalty. Contrary to the aspirations set by the organizational strategy, this resulted in reduced competitiveness of the NSW Bank.

Figure 4 confirms that tension between organizational strategy and WS strategy still existed in Phase 3. Therefore, the negative effects on employees (*WS: Participants*) were the same as in Phase 2.

However, the NSW Bank's initiatives to increase employees' awareness towards community volunteering started to impact organizational culture. This turned out to be the key element which neither impacted on organizational strategy (of One-point contact) or the WS strategy (of cost-reduction).

More precisely, employees were allowed to take one day off per year to be involved in a community volunteering program of their choice. Without any additional company-sponsored initiatives, a number of employees continued their involvement in community volunteering in their own time (on weekends and after hours) still representing the NSW Bank.

Every team member is entitled to one day of leave for community volunteering each year, and flexible working arrangements are available to make further involvement possible. (NSW newsletter, June-July, 2005).

The effect of this volunteering engagement was reported to be three-fold. First, the negative effects on employees created by the mismatch between organizational and WS strategies were offset to some extent, thus contributing to an improved work culture characterized by improved employee morale and commitment.

Complimenting my work during the day with community work after hours helps me achieve balance in my life. I gain a lot personally starting with the warm feeling you get inside when you help people." (Bill, collections team member).

Second, employee volunteering also had a positive effect on the community in general. Employees' presence was noticed by the local community and their (employees') contribution was valued and also largely attributed to the NSW Bank.

On a personal level, it's the satisfaction and reward of knowing you're contributing to a worthy cause. On a business level, you're putting yourself and the bank out there and showing the community your support, which in the country town is everything. (John, Head of Strategy).

Third, increased public visibility resulted in improving customers' impression of the Bank, gradually creating a positive impact on customer loyalty.

One of the ways to gain that trust is through volunteer work. Through our community work we can really show our existing and potential customers that we are good corporate citizens and also earn their loyalty."(Jim, Sales team).

In summary, the NSW Bank initiated the transition process towards customer-centric services expressed through its

Table 4 Work System Snapshot - Phase 2

Work system component	Phase 2: Implementation of WS Components at NSW Bank
<p>STRATEGIES</p> <ul style="list-style-type: none"> - Enterprise, - Organizational and - WS strategy 	<p>Misalignment between organizational and WS strategies becoming apparent. Organizational Strategy is still customer-centric now with a <i>refined</i> set of objectives. WS strategy also focuses on customer centric strategy, but its implementation focuses on cost-cutting and economization:</p> <p><i>“Our customer centric strategy is focused on:</i></p> <ul style="list-style-type: none"> - <i>developing a deep understanding of our customers' needs;</i> - <i>providing value-added solutions that meet these needs; and</i> - <i>building long-term, multi-product relationships with our customers”.</i>(NSW Bank Annual Report, 2006) <p><i>“... Nonetheless, NSW Bank continues its strong discipline by positioning to deliver a flat retained expense line in FY...”</i>(NSW Bank Strategy Document, Y2)</p>
ENVIRONMENT	<p>The “official” strategy-driven commitment to “High-performance culture” still present. However, redundancies and confusion in training, caused by the partial automation and discrepancies between declared customer-oriented strategy and the implemented cost cutting strategy, make high performance culture unrealistic.</p>
INFORMATION	<p>Cost cutting and subsequent redundancies have negative impact on information sharing among participants and functional units.</p> <p><i>“And for us that means then that we have got a whole workforce over the next three or four years, particularly in my area, that we need to redeploy, and move onto other roles in the organization. Because when you alternate processes, you know longer need transactional workers, so the shift from transactional workers to knowledge workers is something that we have got as a significant challenge”.</i></p> <p><i>“Because we are not an automated organization, to actually resolve the [business] problem was to require them [employees] to actually work within their networks. So as soon as you punt them out the door, those networks go with them...and information sharing is lost. And so you have actually lost what is probably a very effective knowledge flow today. And I do not think those things are fully understood.”</i></p>
CUSTOMERS	<ul style="list-style-type: none"> - This component remains the same as in the previous WS snapshot. - However, the cost-cutting strategy has negative impact on customer experience with the Bank and thus customer satisfaction affected. <p><i>“Well we have got some great technology to help our customers, but NSW Bank tends to be a little bit stuck in the 20th century... Currently we are trying to establish something within Collections, so it's a new voice technology... during periods of high customer volumes in our Contact Centre where we may not have a lot of people to take calls, we have adopted an automated voice. And it's a great bit of technology but quiet expensive to install, and we were just about to roll it out, and then a whole heap of people came out of the woodwork and said, no, no one's ever done it before, we do not want to spend a lot of money on it because do not know how people are going to react... if we are always following and not actually leading, well we are never going to be this number one service provider”.</i> (Matt, Collections team)</p>
PARTICIPANTS	<ul style="list-style-type: none"> - Because of focus on cost-cutting, the Bank face loss of headcount due to restructures and redundancies leading to loss of knowledge, low employee morale, affecting relationship between participants. Permanent process workers made redundant and process work either outsourced or performed by newly hired casual process workers. - The Bank faces a significant challenge of making a shift from process/routine workers (no longer required due to BP automation) to knowledge workers. <p><i>“...for us that means then, that we have got a whole workforce over the next three or four years, particularly in my area, that we need to redeploy, and move onto other roles in the organization. Because when you [develop] alternate processes, you no longer need transactional workers, so the shift from transactional workers to knowledge workers is something that we have got as a significant challenge”.</i> (Jose, Head of Operations)</p>
PRODUCTS and SERVICES BUSINESS PROCESSES	<p>Transition from products to services already taking more than two years.</p> <ul style="list-style-type: none"> - BP Automation still in progress. - Process work was outsourced with an objective to retain knowledge work (i.e. anything that required human decision making) within the bank. - However, the Bank had limited understanding of knowledge work and could not define it. <p><i>To limit internet downtime for internet banking, we are working to increase reliability by upgrading our technology.</i> (SIR, Year 3)</p> <p><i>“And we have a large outsourced part of consumer lending portfolio to XNR. We have also more recently outsourced check processing, initially to Uni, which is the wholly owned subsidiary of Unicorn. But then more recently have entered into a, I guess you could call it a joint venture arrangement, with two other major banks, and U was the successful vendor.”</i> (Brett, Head of Outsourcing)</p>
TECHNOLOGY	<p>Business process and data integration still in progress.</p>
INFRASTRUCTURE	<p>In spite of BP Automation still in progress, HR commences training employees on new technology. As the new technology is partially implemented, there is confusion about training. HR also in the process of making the existing participants redundant and this impact on the workload of the remaining employees.</p>

Table 4 (continued)

Work system component	Phase 2: Implementation of WS Components at NSW Bank
	<p>So they bring in casual participants, who need training but would also carry their knowledge away with them when they leave.</p> <p>“Like when we are trained initially, work’s like A-B-C-D, this is the practice and stuff like that. It’s when we actually get out of the training wheel and we are put into some team, it was completely opposite.” (Kathy, Customer relations team)</p> <p>“One of the things that we have found, so obviously we have gone in we have looked at that process from a Six Sigma style process centric quality of process. And that identified some weaknesses, and that’s good. But it also identifies it as a lot of people related issues, like we might have a lot of relief staff in our branches, that when they leave the branch to move on to another relief the knowledge goes with them. And that does not get picked up in normal process assessment”. (Bruce, Head of Research)</p>

strategy of One-point contact - all with an expectation of improved competitiveness. However, the way the transition process was initially implemented resulted in the opposite effect. The major shift towards customer-centric services was not initiated by or driven by the organizational strategy but could be traced back to employee volunteering (WS Participants component). At the time of writing this article, the transition process from product-centric to customer-centric services was still in progress but is expected to have a more positive outlook, due to the improved organizational culture (as reported by the study participants).

8 Research and practical contributions

8.1 Contribution to IS theory and practice

The outcomes of this research bring service innovation to the foreground of IS research, as recommended by Barrett et al. (2015), by adding a transition process from product-centric to customer-centric services (or in the language of service research, “IT-enabled service infusion”) to the proposed list of service research topics relevant to IS researchers. However, we also observed that just identifying relevant IS/service

Table 5 Work System Snapshot - Phase 3

Work system components	Phase 3: Implementation of WS Components at NSW Bank
ENVIRONMENT	<p><i>Organizational culture.</i> Based on management initiative the Bank start to heavily promote the existing community volunteering practices. The existing cost-cutting strategy of the WS did not affect volunteering initiatives</p> <p>“We believe we have a responsibility to support the community, and that community involvement and sustainable business practices go hand in hand”. (Sustainability Impact Report)</p>
PARTICIPANTS	<p>Participants allowed to take time off work to do volunteering activities for organizations of their choice, wearing T-shirt with the Bank’s logo, increasing Bank’s visibility among community. The participants volunteer outside of business hours (lunch time and weekends) still wearing T-shirts with Bank’s logo marketing the Bank’s commitment to the community in their own free time. Participants report achieving a good work-life balance.</p> <p>“The Starlight Foundation, so we were organizing, coordinating, that sort of thing, helping to raise funds... basically we have community involvement, that’s for permanent staff. That’s actually a good thing, and that’s actually looked for to make sure that you are going out and doing some community work. It’s actually from management, they want you to go out and do this stuff, which was a bit of a surprise. And that helps you smile too, because you know you are doing something good”. (Jerry, Credit cards Team)</p> <p>Due reported good work-life balance and participants’ loyalty towards the organization is re-established in spite of redundancies. Participants start to move towards the Bank’s aspiration/ambition of high performance culture.</p> <p>“Complimenting my work during the day with community work after hours helps me achieve balance in my life. I gain a lot personally starting with the warm feeling you get inside when you help people”. (ABC newsletter, Aug., Year 4, emphasis added)</p>
CUSTOMERS	<p>Two things positively impact customer experience. First, Increased employee commitment and loyalty towards the organization result in better customer service. Second, employees’ active participation in community volunteering activities is noticed and well received by customers.</p> <p>“To ACHIEVE our mission to become) No.1 financial organization, we need to build a deeper, stronger, more trusting relationship with our customers. One of the ways to gain that trust is through volunteer work. Through our community work we can really show our existing and potential customers that we are good corporate citizens”. (ABC newsletter)</p>
PRODUCTS and SERVICES	All other WS components remain the same as in the previous snapshots.

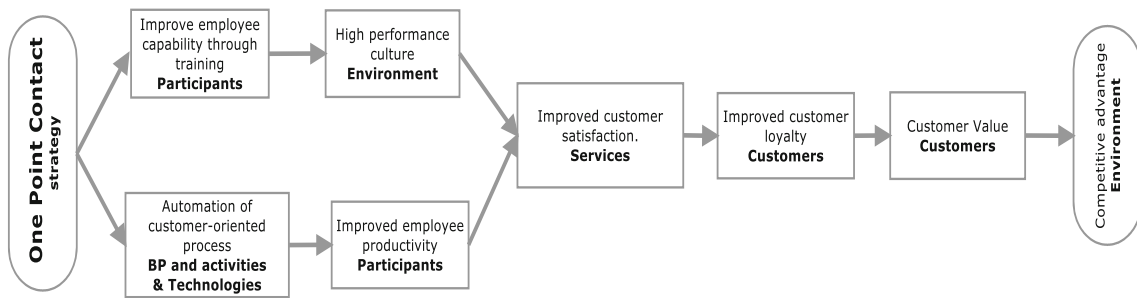


Fig. 2 Implementation of the “One-point contact” work system – Phase 1

science research topics, as interesting as they might be to both IS and service research communities, is not sufficient to truly facilitate cross-disciplinary research. In this respect, in addition to shared definitions, we also observed a need for the so-called conceptual boundary objects (Carlile 2004) as enablers of a cross-disciplinary dialog. We found WST, and in particular the WS framework to be such a boundary object, because it enabled us to synthesize and leverage previous research findings across the respective disciplinary literatures as well as to engage in an in-depth analysis of a complex transition process from a multi-dimensional perspective. When used in practice, the same boundary object could be used to facilitate discussion about service improvement among industry practitioners across different functional units and organizational levels (IT and business).

Our research also contributes to the long-standing IS research on business and IT alignment that has been “a problematic issue for both academics and IT executives for the past two decades” (Reynolds and Yetton 2015, p.114). Through our

study of the transition process, we could also observe the evolving relationship among the organizational (business) strategy, work system (i.e. service) strategy and complex IT infrastructure used to implement them. Our research illustrates the complexities of mutual alignment of these three elements as it evolved over time. Yet, the existing IS literature still assumes that IT strategy is aligned with a single business strategy at a single point in time, as observed by Reynolds and Yetton (2015). Therefore, the outcomes of our research further support the argument previously made by Karpovsky and Galliers (2015) and Reynolds and Yetton (2015) that the alignment should be seen as a dynamic and evolving process. The adopted WST, in particular our proposed use of conceptual diagrams, allowed us to examine the dynamic and temporal nature of this alignment process, and in this way make a contribution to the currently limited IS research on dynamics of IT/business alignment.

Finally, our research also extends a very recent research study on the business process (BP) perspective of IT/

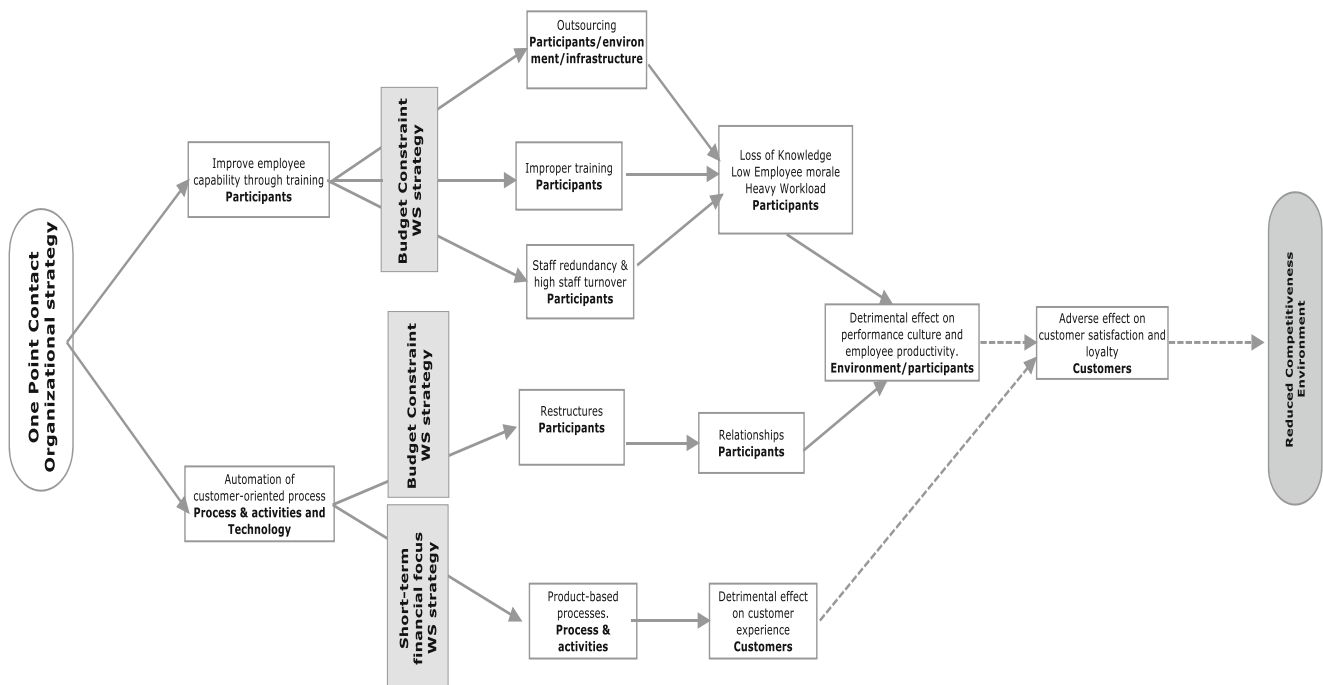


Fig. 3 Implementation of the “One-point contact” work system – Phase 2

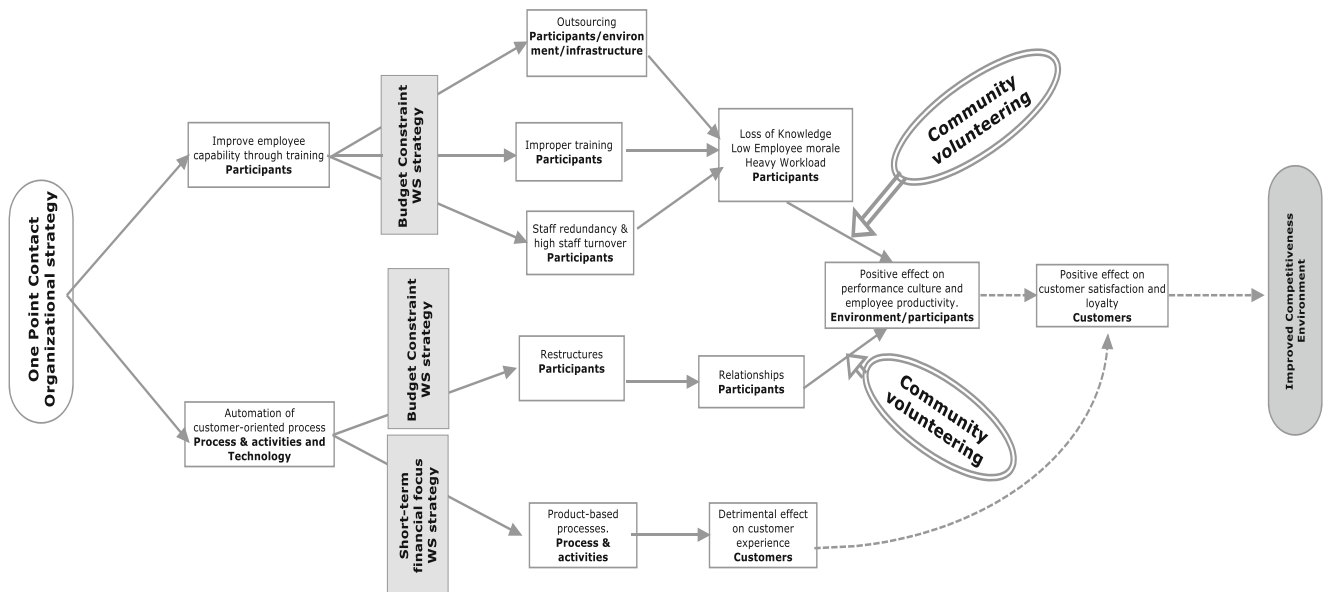


Fig. 4 Implementation of the “One-point contact” work system – Phase 3

business partnership (Siurdyban 2014) towards a more comprehensive service perspective of IT/business partnership. More precisely, using the WS framework it was possible to position BPs that are the core of IT/business partnership according (Siurdyban 2014), into their corresponding service(s). Consequently we argue that the service perspective offers a much more comprehensive viewpoint for the study of IT/business partnership than the BP perspective, especially in service organizations, as demonstrated by our study.

8.2 Contribution to service science research theory and practice

This research makes several important contributions to the emerging service science research. First of all, by developing an in-depth understanding of a transition process from product-centric to customer-centric service, we contribute to the recently identified key research priority of “service infusion”, as stated by Ostrom et al. (2015). Also, by focusing on the organizational aspects of the observed process our research contributes to another key research priority of “understanding organization and employee issues relevant to successful services”, also identified by Ostrom et al. (2015).

Furthermore, our use of WST to study the transition process is novel. The same WST could be used by other researchers to study these processes in other organizational contexts. It could also be adopted by industry practitioners to inform and guide their practices in this area. Our approach of using WST could be taken as an alternative or a complement to well-known S-D because of the organizational (rather than customer) perspective adopted by our method. Also our use of diagrams to document the evolving relationships

among different WS components over time is innovative, providing a dynamic rather than static view of the transitional process.

Our research also confirms that in order to understand the transition process from product-centric to customer-centric services, it is necessary to study it in its broader organizational context and well beyond the observed service. For example, in the NSW Bank the main impetus for the gradual change in organizational culture, necessary for the implementation of customer-centric services, came outside of the work system (i.e. service) being implemented. As it occurred parallel to WS implementation, not affecting its cost cutting and economization strategy in any way, it could have gone *unnoticed*, had we only focused on the service alone. Therefore, the WST proved to be a valuable theoretical tool enabling us to study the organizational context of the observed service, and “capture” the relevant aspects of organizational culture.

This case also confirms the previous observation that managers only have limited guidance in the literature to guide their transition process from product-centric to customer-centric services. In the absence of such guidance organizations are left to experiment on their own. In the case of the NSW Bank, the transitional process is confirmed to be complex and continuously evolving through experimentation and organizational learning. Most importantly the unexpected and unintentional aspects of the process (community volunteering) turned out to be critical to the transition process, rather than deliberate design and implementation of organizational strategy. The WST enabled us to take a holistic approach to understanding of the observed service system and ultimately capture this important organizational aspect that could have been

easily missed, had we focused solely on the implementation of organizational strategy, or just on a single service without considering its context.

Finally, our research further supports the argument recently made by Bowen and Schneider (2014), on the basis of their synthesis of prior research in the emerging area of service climate, that the employees' experiences are reflected in all aspects of service quality, including those perceived by customers. As our research shows, the improved work climate and experience of the NSW Bank's employees was indeed reflected in the more positive experience of their customers and increased customer loyalty, which in turn contributed to the NSW Bank's competitive advantage, as reported by study participants.

9 Conclusions, limitations and future work

This paper has answered the stated research question of how service organizations transition from product-centric to customer-centric services, by contributing to an improved understanding of this transition process from the organizational perspective. We used the Work System Theory to analyze the associated strategic, cultural, technological and other relevant changes, as well as their evolving relationships that together shaped this dynamic process over time. We found the key enabler of this process to lie not in technology or strategy, but in the much harder-to-grasp, let alone manage “service climate” consisting of employees' shared sense of service quality as stated in policies, practices and procedures, and the actual quality as observed in behaviors that are expected, supported and rewarded. Therefore, rather than focusing solely on improvement of customer experience as it is often done in many organization, focusing on employee experiences may be more challenging, but more sustainable and rewarding in the long-term, as suggested by our research.

Furthermore, by definitions, the outcomes of any case study research are not generalizable (Singleton and Straits 2005). Therefore, the research presented in this paper and its outcomes are not intended to be directly transferable to other organizations, as we acknowledge that each organization's context is very unique. This means that we cannot make any prediction that for example, volunteering work found to be important in this case organization would have the same impact in any other organizational environment. Even though our research results are not meant to be generalized, we argue that our innovative approach of using work system snapshots, as well as conceptual diagrams illustrating the evolving relationships between different WS components that we invented for the purposes of better understanding the unfolding transition process, are replicable in other organizational contexts.

Our research focuses on the internal (organizational) rather than external perspective of services (as perceived by

customers). The same internal perspective, as well as our method of using WST may be useful to the IS as well as service science researchers interested in the transition process towards digital consumer services (i.e. “digital transformation”), often caused by the so-called disruptive technologies such as social media or big data. Our current and future research involve further case studies of transition processes from product-centric to customer-centric services in different service industries as well as organizational transformation towards digital consumer services.

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