

Advancing Innovation in Professional Service Firms: Insights from the Service-Dominant Logic

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Innovation is of continuing interest to professional service firms (PSFs) and the scholars who study them. Nevertheless, innovation in PSFs remains underresearched within the wider canon of literature on service innovation, and existing studies typically take a firm-centric perspective on innovation, even though such approaches have been challenged extensively. Our study addresses the shortcomings related to service innovation research, particularly in the context of PSFs, by utilizing the service-dominant logic (SDL)—a framework considered particularly appropriate for understanding innovation in service from a customer-centric standpoint. We apply the SDL to a case of innovation in an engineering consulting firm, and we find that innovation in PSFs is, to a certain degree, unique. Specifically, this work contributes to the literature by identifying multiple beneficiary roles, termed “customer as payer” and “customer as end user,” with often competing and changing values in use. The notion of operant resources is extended to include social capital, and we show how social capital can enable innovation in PSFs. A preliminary model and five propositions that can guide future empirical research on innovation in PSFs, together with managerial implications, are delineated.

Key words: case study; service innovation; service-dominant logic; professional service firm

History: Received October 18, 2012; Received in final revised form May 27, 2013; Accepted May 28, 2013 by Paul Maglio. Published online in *Articles in Advance* July 24, 2013.

1. Introduction

Innovation in professional service firms (PSFs) is often addressed by scholars as a somewhat minor issue related to the broader subject of organizational change (Greenwood et al. 2002, Malhotra et al. 2006, Sherer and Lee 2002) or as a concept pertaining to knowledge work (Anand et al. 2007, Dougherty 2004, Fosstenlokken et al. 2003, Hinings et al. 1999, Morris 2001, Suddaby and Greenwood 2001, Winch and Schneider 1993). This is intriguing given that PSFs are known to be innovative when introducing new value propositions or making research and development investments (Freel 2006).

A concurrent stream of literature on service innovation provides a variety of approaches that attempt to explain innovation in the field (Den Hertog 2000, de Vries 2006, Djellal and Gallouj 2001, Gadrey and Gallouj 2002, Gallouj and Savona 2009, Sundbo and Gallouj 1998). These are typically classified as *technologist* based, where the service innovation is considered to be synonymous with the adoption of information and communication technologies (ICT); *synthesizing* based, which aims to develop a common innovation framework for manufactured goods and services alike; or *demarcation* based, which seeks to identify unique differences in innovation for goods and service (Coombes and Miles 2000, Drejer 2004, Droege et al. 2009, Gadrey and Gallouj 2002).

Most studies of innovation in PSFs can be aligned with the demarcation approach; they share the assumption of context specificity in regard to innovation while focusing predominantly on radical innovations (Fagerberg 2005). Nevertheless, the current state of PSF and service innovation research is fragmented and relatively underdeveloped, and so it provides few clues to understanding, or theories appropriate to, innovation in PSFs. Consequently, there are calls for a “reassessment of established theories and models, and the development and testing of new theories and models” (Gallouj and Windrum 2009, p. 141). As scholars called for service-dominant logic (SDL)-centric investigations of innovation within “professional services markets, such as consulting, legal and technical services” (Payne et al. 2008, p. 94), this paper responds by investigating how scholarship on innovation in PSFs might benefit from utilizing the SDL (Lusch and Vargo 2006, Vargo and Lusch 2004, Vargo et al. 2010). The SDL is increasingly recognized as a new perspective for the investigation of service innovation (Chen et al. 2009, Michel et al. 2008, Nam and Lee 2010, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010), and so we utilize 3 of the 10 foundational SDL premises to which scholars commonly refer in the context of innovation (Michel et al. 2008, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010) to analyze innovation processes in PSFs through a case study in consulting engineering.

By applying the SDL to an innovation context and discussing the relevance of the SDL to understanding innovation in PSFs, we contribute to the current literature in the following manner: First, we extend the literature

on innovation in PSFs beyond the demarcation approach. Second, in discussing and illustrating the use of three SDL tenets, we demonstrate the extent to which the SDL is suitable when attempting to analyze and explain innovation in this context. Finally, by synthesizing the extant literature on PSFs, we provide propositions that can be used to advance our understanding of innovation in PSFs and can inform future empirical research.

2. Innovation and Professional Service Firms

We define innovation as the first attempt to put a new idea into practice (Fagerberg 2005). This definition is useful to understanding both the service innovation and PSF literature because it distinguishes between *invention* (the occurrence of a new idea) and *innovation* (attempting to put that idea into practice for the first time in a specific context).

2.1. Established Perspectives on Innovation in Service

Research on innovation in service can be classified based on three central approaches: technologist, synthesizing, or demarcation (Coombs and Miles 2000, Drejer 2004, Droege et al. 2009, Gadrey and Gallouj 2002). By “reducing” innovation to the adoption of ICT, the technologist approach perceives ICT as the sole driver of innovation. Considered the oldest approach, the technologist approach explicitly theorizes innovation in service and is closely related to innovation approaches originating from manufacturing-related fields (Barras 1986, Den Hertog 2000, Gallouj and Savona 2009).

The synthesizing approach perceives innovation as an overarching idea that, authors argue, should be applied without distinguishing between innovation in manufacturing and services (de Vries 2006, Droege et al. 2009, Gallouj and Savona 2009, Gallouj and Windrum 2009). This approach treats technical and nontechnical forms of innovation as equal (de Vries 2004) and, unlike the technologist approach, embraces elements other than ICT as drivers of innovation. Overall, synthesizing scholars argue that the interdependence between manufacturing and services implies that differentiating between different types of innovation has become obsolete. This is especially apparent in the servitization area, where service itself becomes a means to innovate in manufacturing contexts (Coombs and Miles 2000, Miozzo and Soete 2001).

The third approach, demarcation, is grounded in the assumption that service-specific theories of innovation are necessary because some types of innovation are unique to service firms (Den Hertog 2000, Gadrey et al. 1995, Preissl 2000). Nijssen et al. (2006, p. 242), for example, argue that “the specific characteristics of services, i.e., their intangibility, coproduction with customers, simultaneity, heterogeneity, and perishability . . . affect the development process of services and make them to a certain degree unique.” Consequently, scholars following the demarcation approach often focus on individual “service sectors,” where they “highlight the existence of particular forms of innovation in services” (Gadrey and Gallouj 2002, p. 19). For instance, in the knowledge-intensive service sector, Gadrey and Gallouj (1998) use the consulting industry as an example and consider “ad hoc innovation” as the main type of innovation.

2.2. Innovation in the Context of Professional Service Firms

Innovation has also been discussed among scholars who focus entirely on PSFs as their unit of analysis. Scholars typically regard innovation in PSFs as *organizational change* (for examples, see Greenwood et al. 2002, Malhotra et al. 2006, Sherer and Lee 2002) and as *knowledge work* (Anand et al. 2007, Dougherty 2004, Fosstenlokken et al. 2003, Hinings et al. 1999, Morris 2001, Suddaby and Greenwood 2001, Winch and Schneider 1993). These are seen as somewhat unique to PSFs, with context specificity perceived as important to understanding the phenomena of innovation. As a result, these approaches are broadly consistent with the ideas brought forward by scholars following the demarcation approach.

2.2.1. Innovation and Organizational Change. Morris (2008) classifies theories of innovation in PSFs as those that are driven by forces external to the firm or those that consider innovation to arise from within the firm. The literature on innovation and organizational change falls in the former group. Organizational change, or even institutional change, is considered to be a form of innovation that is initiated exogenously from social, technological, regulatory, or economic jolts (Baark 2005, Greenwood et al. 2002). Much of the literature on archetypical change in PSFs falls into this category (Brock 2006, Fenton and Pettigrew 2000, Malhotra et al. 2006, Sherer and Lee 2002). The precipitating events are relatively infrequent, and so one might expect that the consequential innovations are also relatively infrequent. One concern arising from these exogenous forces is that change may erode the distinctiveness of PSFs (Burrell 2002). As PSFs take on the characteristics of more managerial organizations (Cooper et al. 1996), they may reduce their ability to innovate (Ferlie and McNulty 1997).

2.2.2. Innovation and Knowledge Work. Innovation in PSFs is also investigated through perspectives rooted in the nature of knowledge work, as this is seen as underlying professional services. Because of the nature of this work and the somewhat ambiguous nature of knowledge itself, innovation is consequently hard to explain (Anand et al. 2007). The constant production of knowledge in professional work presents a challenge for scholars seeking to distinguish innovation from more routine processes. Overall, the nature of knowledge work in PSFs suggests that innovation is a tacit feature of professional work that may be described as ad hoc innovation (Gallouj and Savona 2009). Ad hoc innovation is the “interactive social construction of a solution to a particular problem put forward by a client” (de Vries 2006, p. 1039), and it is typically not repeated or formalized into the service repertoire of a firm (Droege et al. 2009).

The perspective of scholars linking innovation and knowledge work is that the production process and the outcome of a service itself are often integrated (Morris 2008). As a result, innovations are often equally integrated; they may, for example, include process, organization, market, and product innovation. Consequently, one might expect that, although benefits can accrue from productivity or new/improved services, it is hard to know which is actually resulting in a benefit. Ultimately, the implication of these two characteristics of knowledge, its ambiguous and tacit nature, enables no clear distinction between innovation and routine firm-centric processes.

2.3. The Challenges of Researching Innovation in PSFs

Although the demarcation approach provides some insight on innovation in PSFs, the current situation remains problematic for two reasons. First, in focusing on organizational change and the challenge of distinguishing innovation from knowledge work, scholars have concentrated on *radical* innovations because these are easily observable, require significant investments, and often change how firms are internally organized. Although these characteristics make it easier to understand organizational change and shifts in knowledge work, we argue they have led PSF scholars to ignore *incremental* innovations. And yet there is evidence that when PSFs do engage in innovation, it is usually incremental and targeted at productivity improvements (Mason 1992). However, because of the complexity of professional service work, it does take time for professionals to master new processes. As a result, perceived innovations based on attempted productivity improvements are often of a lower quality than might be expected (Sundbo 2000). Furthermore, ignoring incremental innovation is problematic since its cumulative impact is considered as important as those of radical innovations (Fagerberg 2005).

Second, despite some PSF scholars taking a demarcation approach, no specific models or theories have emerged that comprehensively explain innovation in PSFs. Such scholars have not addressed the issue as to whether innovation should be considered a phenomenon uniquely relevant to service and PSFs, nor have they considered whether a more holistic innovation approach could be more beneficial. More generally, the demarcation approach has been criticized for its strict adherence to models or types of innovation, such as ad hoc innovation (Gadrey and Gallouj 1998). For example, Drejer (2004) criticizes the lack of repeatability inherent in ad hoc innovation, which contradicts some conventional understandings of innovation. Instead, he suggests that ad hoc innovation represents a learning process, which is part of any organization’s existence, and not an innovation by itself. Ultimately, the current state of PSF and service innovation research is fragmented and underdeveloped, and it provides few clues to understanding whether context-sensitive models or theories are needed to explain innovation in PSFs.

3. Service-Dominant Logic as an Emerging Perspective for Understanding Innovation

3.1. Service-Dominant Logic

The service-dominant logic is based on the notion that service (singular), not goods, is the fundamental basis of economic exchange. Even though the SDL originated in the marketing literature (Vargo and Lusch 2004), it is gaining widespread acceptance as the “philosophical foundation” (Maglio and Spohrer 2008, p. 18) of service science and has been applied in areas as diverse as service management (Gummesson et al. 2010), information technology (IT) operations (Alter 2010), tourism (Shaw et al. 2011), and most importantly, service innovation (Chen et al. 2009, Michel et al. 2008, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010). The SDL extends previous notions of service that were based on unique characteristics distinguishing service provisions and physical goods (Nijssen et al. 2006), but it considers service to be an interactive process, rooted in the “application of competences (knowledge and skills) for the benefit of another” (Vargo and Lusch 2008, p. 256). Such an understanding of economic exchange has obvious implications for service innovation research, where the SDL provides a “novel and valuable theoretical perspective that unifies the conventional literature on innovation”

(Nam and Lee 2010, p. 1761), as called for by Gallouj and Windrum (2009). Arguments brought forth by Michel et al. (2008), Ordanini and Parasuraman (2010), and Sebastiani and Paiola (2010) imply that 3 of the SDL's 10 foundational premises are of particular importance, and we discuss them below.

The first SDL premise we consider is that “the customer is always a cocreator of value” (Vargo and Lusch 2004, p. 2). When interacting with a customer, a firm can offer value *propositions*; it cannot *deliver* value. As value is cocreated by each entity through the integration and application of specific resources, a value proposition needs to be accepted and realized through its use by the beneficiary (Vargo and Lusch 2004, 2006; Vargo et al. 2010). Although the understanding of customers as cocreators of value is firmly embedded within the SDL, different perceptions exist. Heinonen et al. (2010) argue that value, as an outcome, and the process of its creation are distinct parts of customer–firm interactions. Similarly, Spohrer and Maglio (2010) outline interactions within a service system that do not guarantee the emergence of value therein. Although this debate persists, the SDL has been recognized as beneficial for the advancement of service science (Ostrom et al. 2010, Vargo et al. 2010) and service innovation research (Michel et al. 2008, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010). We therefore follow the precedent set by Breibach et al. (2013) and position our study within the SDL's foundational premises by assuming that service providers and customers are cocreators of value. The specific resources in this process can be distinguished into those that are operand or operant.

To understand the second SDL premise, we must first define *operand* resources as physical entities “on which an operation or act is performed” (Vargo and Lusch 2004, p. 2; Vargo and Morgan 2005). The second premise defines *operant* resources, stating that they are “the fundamental source of competitive advantage” and are “employed to act on operand resources and other operant resources” (Vargo and Lusch 2004, p. 2). Operant resources are represented through knowledge, skills, or information, and therefore they are intangible, dynamic, and infinite (Vargo et al. 2010). The use of operant resources may result in new operant resources (for example, ideas or knowledge), or they can be applied to operand resources that may initiate a value cocreation process with another entity.

The third premise from the SDL is that “value is always uniquely and phenomenologically determined by the beneficiary” (Vargo and Lusch 2004, p. 2). Here, it is important to distinguish between value in exchange and value in use. Specifically, value in exchange sees value embedded in operand resources such as goods, which are then *exchanged*, for money. Within the SDL, value is linked to the process of cocreation, with determination of value made by the beneficiaries, including customers, through use. The notion of value in use links the value that a beneficiary experiences to the use of service. Gummesson (2008, p. 115) argues, “The actualization of value is in the hands of the consumer”; this is because “there is no value until an offering is used. Experience and perception are essential to value determination” (Vargo and Lusch 2006, p. 44). This means that, unlike value in exchange, which is often seen as occurring at the point in time of the transaction, value in use emerges over time through the cocreation process (Ballantyne and Varey 2006; Grönroos 2008, 2011). As a result, value in use may be seen as occurring through a series of episodes or stages (Ford 2011).

3.2. Service-Dominant Logic and Innovation

The SDL provides an opportunity for the “rethinking and reevaluation of the conventional literature on innovation” (Michel et al. 2008, p. 54) through a “shift in thinking from attributes to value in use, from produced operand to embedded operant, and from a firm perspective to a genuine consumer-centric view” (Michel et al. 2008, p. 65). Consequently, researchers have called for new empirical work on service innovation through the SDL lens, focusing on operant resources (Chen et al. 2009, Michel et al. 2008, Ordanini and Parasuraman 2010) and including the “point of views of external partners” (Chen et al. 2009, p. 15) such as customers in subsequent studies.

From the perspective of the SDL, innovation focuses on change in the value cocreation process, especially on value in use as perceived by customers (Edvardsson et al. 2010). For innovation to occur, it is necessary to understand and alter the means by which customers cocreate value in use (Edvardsson et al. 2010). By utilizing the SDL as a lens on innovation, organizations have the means to overcome the limitations inherent in previous perceptions of innovation (Ordanini and Parasuraman 2010, Sood and Tellis 2005) and may shift their attention toward various means that improve the value cocreation processes with their customers (Sebastiani and Paiola 2010). In contrast, traditional service innovation approaches are “inspired by a goods-dominant logic,” which leads to “incomplete knowledge about the true nature and impact of service innovations” (Ordanini and Parasuraman 2010, p. 2). For example, the technologist approach perceives IT, an operand resource, to be the source of all innovation, whereas the SDL argues that operant resources such as knowledge and skills are the source of innovation.

4. Research Methodology

4.1. Research Design

Our research objective was to investigate and understand innovation processes in PSFs through an SDL lens and to subsequently determine if, how, and to what extent the SDL can provide unique insights. This work utilizes an illustrative case study (Langley 2007) to build theory, a research method that is considered particularly useful whenever “little is known about a phenomenon” (Eisenhardt 1989, p. 548). As noted by other service scholars, such a case study can enable us to “investigate the phenomenon under study in a real-life context” (Callaway and Dobrzykowski 2009, p. 231).

4.2. Data Collection

One author collected qualitative empirical data through interviews, observation of meetings, and the shadowing of participants (McDonald 2005) over a 10-year period across five countries in Australasia and Europe. Interviews typically lasted 1½–2 hours for each participant, shadowing sessions lasted 50–60 hours during one week with each participant, and observations tended to be one hour in length but could be as long as three days (e.g., strategy retreats). Table 1 provides an overview of the primary qualitative data collected and used for this study.

Interviews focused on the innovation-related activities of our participants, inside and outside of their organization, as well as on the types of projects undertaken. These included internal capacity building (i.e., leadership programs) and business development projects (i.e., the development of new practice areas). Individual projects acted as mini-cases (Eisenhardt and Graebner 2007) within the larger case (Eisenhardt 1989). Specifically, the New Lynn Rail Trench case, upon which this paper is based, is a representative example of one civil engineering project that formed such a mini-case.

Secondary data cover approximately 50 years of our case firm’s history and included advertising and public relations material, newsletters, and company reports. Furthermore, the participants provided access to internal documents such as strategy plans, meeting agendas and presentations, accounting and budget information, and reports on key performance indicators. The third source of secondary data included publicly available documentation from local and central government bodies.

4.3. Data Analysis

To identify constructs that represented the “common properties” (ten Have 2004, p. 3) of our emerging theory, we utilized an inductive theory-building approach commonly referred to as pattern matching or thematic analysis (Eisenhardt 1989, Miles and Huberman 1984, Pettigrew 1997). We thereby used a form of sensemaking that is well known for its applicability when utilizing qualitative data (Langley 1999) and, following recommendations in the literature, commenced the analysis by initially reducing the volume of data through categorization, building abstractions, and developing individual properties (Bower and Gilbert 2005, Creswell 1994, Miles and Huberman 1984). This process was facilitated through the use of ATLAS.ti, a software program for the analysis of qualitative data, as recommended by Yin (2011). Finally, as suggested by Colquitt and Zapata-Phelan (2007), we created a box-and-arrow model that depicts the core properties of our emerging model where we formally described individual relationships between these properties through propositions (Colquitt and Zapata-Phelan 2007, Eisenhardt and Graebner 2007). The following section discusses the findings of this study and concludes with the theoretical model and propositions that epitomize our theoretical contribution to service research.

Table 1. Overview of Primary Qualitative Data Collected

Informant type	Executive/ governance	Top management	Mid-level/ project management	Regular employee	External stakeholder (i.e., customer representatives)
No. of informants	11	21	17	9	7
No. of observations	27	34	50	13	13
No. of interviews	19	29	21	17	10
No. of shadowings	1	3	3	2	0

5. The New Lynn Rail Trench: An SDL Perspective on Innovation

5.1. Case Overview

At the core of our study stands a case that describes how, beginning in 2007, a government-funded program aimed to improve the railway infrastructure in Auckland, New Zealand. Specifically, plans to redevelop a railway station in the suburb of New Lynn that, at the time, consisted of a single track passing through a major road intersection at the third-busiest station in New Zealand. The redevelopment called for a rail trench—placing the track below the road while allowing the “double tracking” of lines—to separate the rail and road traffic.

Project planning and implementation involved multiple public and private sector organizations that represented the various service providers and customers. KiwiRail, a government-owned organization responsible for New Zealand’s rail track infrastructure, had secured major funding for the rail trench project, and two local government entities, the Auckland Transport Authority (ARTA) and the Waitakere City Council (WCC), were also involved as service customers in the process. The project was realized through a special form of “full delivery,” a public–private partnership referred to as *alliancing*.¹ This mechanism is adopted when high levels of uncertainty exist in terms of the design (i.e., how to do the project) and, as a result, in the cost of the project (Le Masurier et al. 2006).

KiwiRail, with input from its partners, invited two consortia—Fletcher-Beca-Synergine and Track Alliance—to compete for the construction of the rail trench. The challenges faced were typical of alliance work, as was the size of the project: the primary trench was to be 900 meters long, 8 meters deep, and between 11 and 18 meters wide, and the trench needed to be constructed in an area that sat on unstable land with a strong tendency to slip. Furthermore, the project had multiple stakeholders, including road users whose route would no longer cross busy rail tracks once the trench was completed, rail users who would experience faster trains, local residents who would experience less noise once the trains ran below ground, taxpayers who provided funding, and engineering consultants who had to manage its construction.

An innovation, as defined by Fagerberg (2005), is the first attempt to put a new idea into practice, and the case of the New Lynn train trench portrays a situation that illustrates innovation in a PSF: one engineer from the Fletcher-Beca-Synergine consortium had previously worked in Italy, where he learned to use a system based on the thixotropic properties of bentonite to stabilize volatile materials during excavations. The New Lynn project was the first time that this idea, or innovation, had been used in New Zealand, and it represented a cost-efficient and highly productive method for constructing the rail trench. Furthermore, the project utilized another first-time solution that allowed the tracks to remain in use during the construction of the trench by temporarily moving the rail line along the top of one of the bentonite diaphragm walls until the tracks could be relaid into the completed trench.

Even when viewed through the traditional lens of PSF scholars, this case can be perceived as an example for innovation as *knowledge work* (Anand et al. 2007, Dougherty 2004, Fosstenlokken et al. 2003, Hinings et al. 1999, Morris 2001, Suddaby and Greenwood 2001, Winch and Schneider 1993), or an integrated innovation process that is part of *organizational change* (Greenwood et al. 2002, Malhotra et al. 2006, Sherer and Lee 2002). However, as indicated previously, these perspectives on innovation within PSFs remain inconclusive and firm-centric, and they lack the perspective of other stakeholders in the process, such as customers (Chen et al. 2009, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010). We therefore discuss our findings through an SDL lens to determine if and how this perspective can advance our understanding of innovation in PSFs.

5.2. The Customer Is Always a Cocreator of Value

The role of customers as cocreators of value has been emphasized in the SDL-driven service innovation literature (Chen et al. 2009, Michel et al. 2008, Ordanini and Parasuraman 2010, Sebastiani and Paiola 2010). Similarly, the wider business-to-business (B2B) literature distinguished between individual decision makers such as chief executive officers and influencers such as board and audit committee members (Lynn 1987), and it argues that understanding the various stakeholders is important to reduce risks, avoid conflicts of interest, improve organizational performance (Dawes et al. 1992, Day and Barksdale 1992, Lynn 1987, Mitchell 1994), and support the diffusion of innovation through word of mouth (Buttle 1998, Mangold 1987, Money 2000). Although the B2B literature already explores various stakeholder perspectives, within the context of SDL-driven innovation research, Michel et al. (2008) argue that one of the first priorities when investigating innovation through the SDL should be providing insights that highlight the various roles that customers as value cocreators can perform. Ballantyne and Aitken (2007) add that it is necessary to understand the social interactions between firms and customers through

¹ The particular form of alliancing used by New Zealand Transport Agency is subject to intellectual copyright.

which value in use is created. We address this challenge and extend our understanding beyond the existing literature by providing an understanding of customers as a plurality of actors who cocreate value in different and sometimes competing ways. The findings of our case indicate that, when understanding customers as plural actors that engage in the cocreation of value, it is first and foremost necessary to distinguish between a “customer as payer” and a “customer as end user.”

Customers as payers include the individuals or organizations that provide financial compensation for the construction of the rail trench—here, KiwiRail, ARTA, and WCC. The role of these government organizations as immediate customers as payers was defined through contractual agreements. *Customers as end users* include individuals or organizations that directly experience the changes in their environment, such as New Lynn residents, road and rail users in the area, and all who are benefactors from improved rail and road traffic. KiwiRail and its associates made a conscious effort to include customers as end users into the project so as to better understand both their needs and the impact of the project during construction. This was clearly communicated to the public through committee meeting proceedings:

The Council has undertaken a consultation programme with New Lynn landowners in proximity to the rail corridor, and has held three public consultation meetings . . . Council officers are working with the communications advisors, . . . the media and general public concerns prior to and during the construction period to ensure that the views of the community are clearly expressed back to the Council. (Waitakere City Council 2009, p. 25)

It was in those meetings that customers as end users could voice their concerns about the ongoing construction of the rail trench. For example, one resident and future customer as end user of the rail trench raised issues relating to increased noise levels during the construction that might affect a local childcare facility:

[Lollipops, a childcare center in New Lynn] are . . . concerned about the width of the driveway of the park and ride outside their building, the volume of traffic and the related noise levels as they have babies sleeping inside the building. (Waitakere City Council 2008a, p. 2)

As we distinguish between customers as payers and customers as end users, it becomes clear that the SDL’s premise of *the customer* as a cocreator of value should be extended to *customers* as cocreators of value when discussing innovation in service. Of course, we acknowledge that stakeholders matter (Gummeson 2002) and that further research is required to achieve a “better understanding of the processes involved in value cocreation” (Mele and Polese 2011, p. 209). However, our findings suggest that identifying multiple beneficiaries and customers may even be more complicated than the SDL and B2B literature suggests. For example, the individual engineers and builders that created the rail trench were residents of Auckland and, in some instances, residents of New Lynn. Therefore, these engineers held multiple roles representing both the service provider *and* customers as end users (as residents of New Lynn).

5.3. Operant Resources Are the Fundamental Sources of Competitive Advantage

The SDL considers operant resources to be the fundamental sources of competitive advantage (Vargo et al. 2010). In an innovation context, these are represented through knowledge, skills, or information, and they are perceived as intangible, dynamic, and infinite (Vargo et al. 2010). The key operant resource that we identified in our case is the engineering and construction expertise that each firm contributed through their professional staff. The intellectual achievement of the engineers involved in this project, and the resulting innovation to New Zealand’s economy, was highly praised by the wider public. It resulted in the New Lynn Rail trench project team receiving New Zealand Engineering Excellence project and product awards in 2012:

The team designed and constructed a floating rail trench box using an innovative succession of track slews . . . not seen before in New Zealand . . . Technical and sequencing innovations developed for the New Lynn Rail Trench are now being implemented on other projects in New Zealand.²

Hitt et al. (2001) argue that skills and knowledge of employees are the central resources of innovation in PSFs, and that these are typically preserved by collective sanctions (Freidson 2001). When we compared the endowment of individual skills of both consortia that went through to the final phase of the procurement process, we found that these were similar in regard to the expertise and track record offered. However, the decision by KiwiRail to select Fletcher-Beca-Synergine as the winning consortium was not based on the latter’s knowledge and skills or operant resources but on how well Fletcher-Beca-Synergine was likely to function as a member of the alliance with KiwiRail. This “best-for-project” decision was rooted in the perception of “fit,” and it was largely attributed to matching values and the ability to form interpersonal relationships. This decision

² As noted during the New Zealand Engineering Excellence Awards 2012 evaluation process.

was considered crucial to the success of the project and was highlighted in subsequent publications, such as proceedings of various industry conferences:

The benefits derived during this all-inclusive [procurement] process included early establishment of collaborative relationships between Client (as owner), Client (as asset operators), Contractor, Designers, Consent Planners, and associated Key Stakeholders (ARTA and WCC). . . . These relationships were based on “best-for-project” decision making principles. (McDonald and Crawford 2010, p. 638)

The Fletcher-Beca-Synergine consortium agreed with KiwiRail, the service customer. For example, one Fletcher engineer highlighted how the decision to select a service provider based on interpersonal fit, rather than on knowledge and skills alone, was a key success factor for the project:

A key part for the success of the project is . . . the strong *collaborative* “best for project” behaviours displayed by all parties involved. (Cash and McDonald 2011, p. 5, emphasis added)

The links between Fletcher-Beca-Synergine and KiwiRail can also be viewed through a social capital lens. Social capital provides individuals and organizations with tacit knowledge that, when combined with existing skills and knowledge, can contribute to a firm’s competitive advantage (Nahapiet and Ghoshal 1998), for example, by helping service providers to “better understand the priorities of the various stakeholders in a customer firm” (Tuli et al. 2007, p. 12). Furthermore, the value of social capital is known to increase with the complexity of the problem at hand (Lian and Laing 2007). A critical example of the use of social capital was the identification of the bentonite system by one of the Beca engineers and its implementation as an innovation in New Zealand. The identification and implementation of the Italian system involved the culmination of relationships between the Beca engineer and his former Italian colleagues (i.e., social capital) and the engineer’s operant resources (i.e., skills and knowledge) to understand how the system could be adapted to meet the needs of KiwiRail. In the process of adapting the Italian solution for the New Lynn Rail trench project, the engineers developed tacit knowledge that was later recognized by an industry award:

Diaphragm wall construction of this size had not previously been undertaken in New Zealand. The constructor worked with the Italian company Trevi SPA who provided plant and technical knowledge in a technology transfer with Fletcher Construction.³

We suggest that our understanding of operant resources (i.e., knowledge and skills) as a core source of innovation should, at least in a PSF context, be extended to equally include social capital as an operant source of innovation. Our argument extends arguments brought forward by PSF scholars who state that the application of professionals’ knowledge and skills results in social capital, which then provides opportunities to maintain existing relationships (Anand et al. 2007, Greenwood et al. 2005, Hitt et al. 2001). Consequently, knowledge, skills, and social capital represent operant resources that are the main source of innovation in PSFs.

5.4. Value Is Always Uniquely and Phenomenologically Determined by the Beneficiary

Change in the value cocreation process, as well as the perception of value in use, is central to a SDL-driven understanding of innovation (Edvardsson et al. 2010). Researchers have argued that to innovate effectively, it is necessary to understand and alter the means by which customers cocreate value in use, as well as to initiate new ways that facilitate the actual process of value cocreation.

We extend the current discourse by distinguishing between multiple beneficiaries as cocreators of value. Specifically, customers as payers and customers as end users have different objectives and needs, and they seek varying degrees of involvement. Although KiwiRail and the local government entities ARTA and WCC can be considered mostly as customers as payers that cocreated the actual rail trench with Fletcher-Beca-Synergine, other individuals such as road users, rail users, residents living around the trench, and the national taxpayers or landholding ratepayers who funded the project, as customers as end users, were not directly involved in this process.

Furthermore, as the consenting authority and service customer, WCC itself had competing interests. For example, there was a strong incentive to reduce cost by adopting innovative solutions. However, as the consenting government authority, WCC had to ensure that the work was “done right” and complied with the relevant policies for both construction and resource management. Since these conflicting roles placed councilors and council staff in situations of conflicting roles, the council itself noted that

[t]here have been discussions with the Council’s resource consents staff to alert them . . . to concerns that have been raised about the project. (Waitakere City Council 2008b, p. 17)

³ As noted during the New Zealand Engineering Excellence Awards 2012 evaluation process.

What is particularly fascinating is that conflicts of interest at an individual level arose. Specifically, some members that were *professionally* responsible for the cocreation of the rail trench were also *individual* residents of New Lynn and were therefore affected by the construction of the rail trench. As customers as payers, the institutions KiwiRail, ARTA, and WCC were concerned with the return on their investment for society. The questions of reelection and public perception of the project were also important aspects. In contrast, as individual customers as end users, some employees of ARTA and WCC were concerned with increased safety. Additional costs, as well as disturbances through the construction of the rail trench, were also considered. As conflicting interests arose, warnings were issued to institutionalize the separation of professional customers as payers and private customers as end users:

Elected Members were reminded via the agenda, of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member of the Council and any private or other external interest they might have. (Waitakere City Council 2008a, p. 1)

When taking the roles of multiple beneficiaries into consideration, it becomes obvious that value is perceived differently—not only by different actors but also by the same actor depending on the role encompassed by that actor. Investigating value perceptions with a single customer or beneficiary in mind is therefore likely to provide incomplete insights on a complex issue that involves beneficiaries or customers (plural). Furthermore, these multiple beneficiaries have potentially conflicting and not necessarily complementary perceptions of value. Yet to be able to provide successful value propositions, a PSF needs to take the attempted value perceptions of all beneficiaries into consideration.

6. Discussion

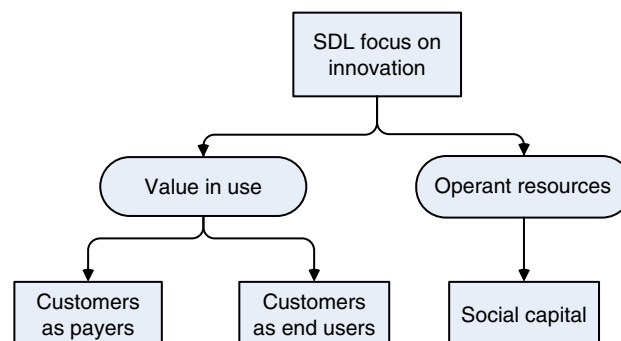
PSFs are evidently successful innovators. Nevertheless, theoretical insights that comprehensively explain innovation in PSFs, as well as meaningful managerial insights, are currently lacking. The aim of this paper was to explore if, and how, the SDL can help to advance our understanding of innovation in PSFs, and whether or not it can provide a new analytical lens in the domain, as called for by Gallouj and Windrum (2009). We approached this goal by applying three central SDL premises to the case of innovation within the context of an engineering consulting project. In this section we discuss the theoretical and management implications of our study and outline limitations and future research opportunities.

6.1. Theoretical Implications

Our findings indicate that some limitations exist when utilizing the SDL to explain innovation processes in PSFs. Although the SDL represents a significant contribution that helped to advance our knowledge of innovation in service, our findings show how the SDL-driven understanding of innovation may be extended to explain the nature of innovation in the context of PSFs. We subsequently discuss a set of propositions that provide further theoretical insight into the nature of innovation in service, and we summarize our findings in Figure 1.

First, we suggest that, in the context of innovation in PSFs, operant resources should be defined beyond just skills and knowledge. We propose that, as operant resources, knowledge and skills are akin to “hygiene factors”: although they are necessary, they may not be the sole sources of innovation. We argue that social capital is an equally important operant resource that enables PSFs to create competitive advantages and facilitates the exploration of new ways of doing professional work. By trying new ways of work, professionals benefit from developing their repertoire and enhancing their career. At the same time, PSFs benefit from innovation through

Figure 1. Perspectives on Innovation in PSFs



an improved competitive advantage. This leads us to propose a relationship between operant resources, social capital, and innovation.

Proposition 1. *Innovation in PSFs is enabled by operant resources, including skills, knowledge, and social capital.*

Second, the SDL notion of the “beneficiary” or customer (singular) as cocreator of value is problematic in the context of innovation in PSFs. Our findings indicate that there are multiple beneficiaries—beyond the professional and the PSF—involved, such as customers as end users and customers as payers. These multiple beneficiaries seem to have somewhat distinct roles. It is thus not surprising that this somewhat confusing situation is in line with the call for more research in this area made by Michel et al. (2008). We therefore consider whether understanding the role of beneficiaries (plural) can help to explain innovation in PSFs by attempting to understand both the professional and the customer. Furthermore, we suggest that scenarios with multiple beneficiaries are not unique to engineering consulting firms but extend to other PSFs as well. For example, within medical insurance services, the medical professional might have to contend with both the customer as payer (the insurance firm) and the customer as end user (the beneficiary of the insurance policy). As a result of the existence of multiple beneficiaries, there may be divergent interests among groups of beneficiaries (for example, between customers as payers and customers as end users) when multiple entities engage in the cocreation process.

Proposition 2. *The interests of individual beneficiaries are not aligned and thus result in competing experiences of value in use.*

Proposition 3. *Innovation—change in the cocreation process—is not experienced equally across all groups of beneficiaries.*

Third, building on the notion that value in use emerges over time (Ballantyne and Varey 2006) and that social interactions between firms and customers are likely to influence this process (Ballantyne et al. 2011), our case highlights the existence of stages where different perspectives of value in use will be experienced; such stages include the implementation phase (the planning and construction of the rail trench) and the “use” phase. The SDL somewhat obscures the fact that, in certain situations, there can be different values cocreated during a number of phases. Again, this situation is not unique to engineering. Thinking of health services—in this case, say, dentistry—the value in use experienced during a filling procedure is entirely different from the value in use experienced through the durability of the filling. Again, there may be trade-offs or competing experiences of value in use: to what extent would one value a more painless filling procedure compared to having a filling that is more durable and lasts longer (e.g., 20 years or more)? Other phases may also exist, such as decommissioning or handover phases. Insights into phases suggest additional opportunities for new value in use—that is, for innovation. Overall, the existence of phases leads to the following proposition.

Proposition 4. *Value in use, as perceived by the beneficiary, varies at each stage of the experience.*

Proposition 5. *Innovation—change in the value cocreation process—may be achieved at different stages of the value-in-use experience.*

This work extends the literature on innovation in PSFs by integrating concepts originating from more traditional demarcation approaches with the SDL. By discussing and illustrating the use of three SDL tenets, we furthermore demonstrate the extent to which the SDL is suitable to explaining innovation in the context of PSFs. Specifically, we discuss the limitations of the SDL premises and present a framework of innovation in PSFs that will hopefully benefit future scholars in the field.

6.2. Managerial Implications

Our study presents a range of managerial challenges, and although more research is required, it also suggests useful implications. First, practitioners have long struggled with goods-centric thinking and the resulting challenge of “delivering services” that are valued by customers. We indicate through Proposition 2 that different beneficiaries exist and that these may have competing experiences of value in use. Our third proposition explains that those experiences are not experienced equally but that individual beneficiaries may also assume different viewpoints here. Practitioners should therefore acknowledge that it may be necessary to understand potentially competing and differing needs, rather than organizing to deliver the same level of value to customers at the same time.

We also suggest that practitioners should attempt to acknowledge the role of social capital as an operant resource that can enable innovation. Ongoing discussions of “soft-skills development” in PSFs (Money 2000)

and of B2B relationships (Lian and Laing 2007, Tuli et al. 2007) have led to suggestions that managers attempt to develop the ability to develop and manage personal relations, or social capital, with customers and other stakeholders not just for their own benefit but also for their staff's. Such recommendations are not new; however, they traditionally seek to promote smooth internal operations or attempt to facilitate the acquisition and retention of customers. The potential for social capital to foster innovation, however, has not yet been addressed. Our findings highlight the link between social capital and innovation, and we encourage managers to enable their employees' to build social capital and to monitor the extent of innovations arising from social capital.

6.3. Limitations and Future Research

We utilize an illustrative case study (Langley 2007) for the purpose of theory building (Eisenhardt 1989) and thereby provide findings that may not be generalizable over a wider population. However, we do see great potential for future work emerging from our study. Specifically, we recognize recent calls to extend the SDL by exploring the role of open innovation (Chesbrough 2011, Ordanini and Parasuraman 2010). Exploring the interrelationship between open innovation and PSFs—specifically, by investigating the link between external ideas and the perception of value in use in professional services (Ford 2011)—may generate important new insights.

Furthermore, future research opportunities exist by way of empirical extension. Although our illustrative case study goes some way to address the need for more empirical SDL studies (Payne et al. 2008), more work is required. Empirical testing of the propositions derived from this study provides a way to refine the preliminary model outlined and contributes to advancing SDL-based explanations of innovation. Furthermore, because we identify that multiple beneficiaries and customers may even be more complicated than what the SDL and B2B literature suggests—in particular, customers as payers and customers as end users appear to have different objectives and needs, and they seek varying degrees of involvement—it would be beneficial to explore how organizations can understand competing expectations and offer value propositions accordingly.

References

- Alter S (2010) Does service-dominant logic provide insight about operational IT service systems? *AMCIS 2010 Proc.*, Paper 138. <http://aisel.aisnet.org/amcis2010/138/>.
- Anand N, Gardner HK, Morris T (2007) Knowledge-based innovation: Emergence and embedding of new practice areas in management consulting firms. *Acad. Management J.* 50(2):406–428.
- Baark E (2005) New modes of learning in services: A study of Hong Kong's consulting engineers. *Indust. Innovation* 12(2):283–301.
- Ballantyne D, Aitken R (2007) Branding in B2B markets: Insights from the service-dominant logic of marketing. *J. Bus. Indust. Marketing* 22(6):363–371.
- Ballantyne D, Varey RJ (2006) Creating value-in-use through marketing interaction: The exchange logic of relating, communicating and knowing. *Marketing Theory* 6(3):335–348.
- Ballantyne D, Frow P, Varey RJ, Payne A (2011) Value propositions as communication practice: Taking a wider view. *Indust. Marketing Management* 40(2):202–210.
- Barras R (1986) Towards a theory of innovation in services. *Res. Policy* 15(4):161–173.
- Bower JL, Gilbert CG (2005) Bower JL, Gilbert CG, eds. *From Resource Allocation to Strategy* (Oxford University Press, Oxford, UK).
- Breidbach CF, Kolb DG, Srinivasan A (2013) Connectivity in service systems: Does technology-enablement impact the ability of a service system to co-create value? *J. Service Res.* 16(3):427–440.
- Brock DM (2006) The changing professional organization: A review of competing archetypes. *Internat. J. Management Rev.* 8(3):157–174.
- Burrell G (2002) Twentieth-century quadrilles: Aristocracy, owners, managers, and professionals. *Internat. Stud. Management Organ.* 32(2):25–25.
- Buttle F (1998) Word of mouth: Understanding and managing referral marketing. *J. Strategic Marketing* 6(3):241–254.
- Cash D, McDonald M (2011) New Lynn rail trench—Transformation through collaboration. Presentation at IPENZ Transportation Group 2011 Conference, March 30, IPENZ, Wellington, New Zealand. http://www.hardingconsultants.co.nz/ipenz2011/downloads/Cash_Darren.pdf.
- Callaway SK, Dobrzykowski DD (2009) Service-oriented entrepreneurship: Service-dominant logic in green design and healthcare. *Service Sci.* 1(4):225–240.
- Chen J-S, Tsou H-T, Huang A (2009) Service delivery innovation. *J. Service Res.* 12(1):36–55.
- Chesbrough HW (2011) Bringing open innovation to services. *MIT Sloan Management Rev.* 52(2):85–90.
- Colquitt JA, Zapata-Phelan CP (2007) Trends in theory building and theory testing: A five-decade study of the *Academy of Management Journal*. *Acad. Management J.* 50(6):1281–1303.
- Coombs R, Miles I (2000) Innovation, measurement and services: The new problematic. Metcalfe JS, Miles I, eds. *Innovation Systems in the Service Economy: Measurement and Case Study Analysis* (Kluwer Academic Publishers, Boston), 85–104.
- Cooper DJ, Hinings CR, Greenwood R, Brown JL (1996) Sedimentation and transformation in organisational change: The case of Canadian law firms. *Organ. Stud.* 17(4):623–647.
- Creswell JW (1994) *Research Design: Qualitative and Quantitative Research Approaches* (Sage, Thousand Oaks, CA).
- Dawes PL, Dowling GR, Patterson PG (1992) Criteria used to select management consultants. *Indust. Marketing Management* 21(3):187–193.
- Day E, Barksdale HC Jr (1992) How firms select professional services. *Indust. Marketing Management* 21(2):85–91.
- Den Hertog P (2000) Knowledge-intensive business services as co-producers of innovation. *Internat. J. Innovation Management* 4(4):491–528.

- de Vries EJ (2004) Innovation in services: Towards a synthesis approach. PrimaVera Working Paper 2004-20, Universiteit van Amsterdam, Amsterdam.
- de Vries EJ (2006) Innovation in services in networks of organizations and in the distribution of services. *Res. Policy* 35(7):1037–1051.
- Djellal F, Gallouj F (2001) Patterns of innovation organisation in service firms: Postal survey results and theoretical models. *Sci. Public Policy* 28(1):57–67.
- Dougherty E (2004) The balance of practice. Accessed November 23, 2012, <http://www.elizd.com/website-LeftBrain/essays/practice.html>.
- Drejer I (2004) Identifying innovation in surveys of services: A Schumpeterian perspective. *Res. Policy* 33(3):551–562.
- Droege H, Hildebrandt D, Forcada MAH (2009) Innovation in services: Present findings, and future pathways. *J. Service Management* 20(2):131–155.
- Edvardsson B, Gustafsson A, Kristensson P, Witell L (2010) Service innovation and customer co-development. Maglio PP, Kieliszewski CA, Spohrer JC, eds. *Handbook of Service Science* (Springer, Berlin), 561–577.
- Eisenhardt KM (1989) Building theories from case study research. *Acad. Management Rev.* 14(4):532–550.
- Eisenhardt KM, Graebner ME (2007) Theory building from cases: Opportunities and challenges. *Acad. Management J.* 50(1):25–32.
- Fagerberg J (2005) Innovation: A guide to the literature. *The Oxford Handbook of Innovation* (Oxford University Press, Oxford, UK), 1–26.
- Fenton EM, Pettigrew A (2000) Theoretical perspectives on new forms of organizing. Pettigrew A, Fenton E, eds. *The Innovating Organization* (Sage, London), 1–46.
- Ferlie E, McNulty T (1997) “Going to market”: Changing patterns in the organisation and character of process research. *Scand. J. Management* 13(4):367–387.
- Ford D (2011) IMP and service-dominant logic: Divergence, convergence and development. *Indust. Marketing Management* 40(2):231–239.
- Fosstenlokken SM, Løwendahl B, Revang Ø (2003) Knowledge development through client interaction: A comparative study. *Organ. Stud.* 24(6):859–879.
- Freel M (2006) Patterns of technological innovation in knowledge-intensive business services. *Indust. Innovation* 13(3):335–358.
- Freidson E (2001) *Professionalism, The Third Logic: On the Practice of Knowledge* (University of Chicago Press, Chicago).
- Gadrey J, Gallouj F (1998) The provider-customer interface in business and professional service. *Service Industries J.* 18(2):1–15.
- Gadrey J, Gallouj F, eds. (2002) *Productivity, Innovation and Knowledge in Services: New Economic and Socio-Economic Approaches* (Edward Elgar, Cheltenham, UK).
- Gadrey J, Gallouj F, Weinstein O (1995) New modes of innovation: How services benefit industry. *Internat. J. Service Industry Management* 6(3):4–16.
- Gallouj F, Savona M (2009) Innovation in services: A review of the debate and research agenda. *J. Evolutionary Econom.* 19(2):149–172.
- Gallouj F, Windrum P (2009) Services and services innovation. *J. Evolutionary Econom.* 19:141–148.
- Greenwood R, Li SX, Prakash R, Deephouse DL (2005) Reputation, diversification, and organizational explanations of performance in professional service firms. *Organ. Sci.* 16(6):661–673.
- Greenwood R, Suddaby R, Hinings CR (2002) Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Acad. Management J.* 45(1):58–80.
- Grönroos C (2008) Extending the logic: Rethinking value creation and co-creation, and their marketing implications. Lusch R, Vargo S, Layton R, eds. *Proc. Forum Markets Marketing: Extending Service-Dominant Logic, Sydney, Australia*, 348–375.
- Grönroos C (2011) Value co-creation in service logic: A critical analysis. *Marketing Theory* 11(3):279–301.
- Gummesson E (2002) *Total Relationship Marketing: Rethinking Marketing Management*, 2nd ed. (Butterworth-Heinemann, Oxford, UK).
- Gummesson E (2008) Quality, service-dominant logic and many-to-many marketing. *TQM J.* 20(2):143–153.
- Gummesson E, Lusch RF, Vargo S (2010) Transitioning from service management to service-dominant logic: Observations and recommendations. *Internat. J. Quality Service Sci.* 2(1):8–22.
- Heinonen K, Strandvik T, Mickelsson K-J, Edvardsson B, Sundstrom E, Anderson P (2010) A customer-dominant logic of service. *J. Service Management* 21(4):531–548.
- Hinings CR, Greenwood R, Cooper DJ (1999) The dynamics of change in large accounting firms. Brock DM, Powell MJ, Hinings CR, eds. *Restructuring the Professional Organisation: Accounting, Health Care and Law* (Routledge, Oxon, UK), 131–153.
- Hitt MA, Bierman L, Shimizu K, Kochhar R (2001) Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Acad. Management J.* 44(1):13–28.
- Langley A (1999) Strategies for theorizing from process data. *Acad. Management Rev.* 24(4):691–710.
- Langley A (2007) Process thinking in strategic organization. *Strategic Organ.* 5(3):271–282.
- Le Masurier J, Wilkinson S, Shestakova Y (2006) An analysis of the alliancing procurement method for reconstruction following an earthquake. *Proc. 8th U.S. Natl. Conf. Earthquake Engrg., San Francisco*. http://academia.edu/2467351/AN_ANALYSIS_OF_THE_ALLIANCING_PROCUREMENT_METHOD_FOR_RECONSTRUCTION_FOLLOWING_AN_EARTHQUAKE.
- Lian PCS, Laing AW (2007) Relationships in the purchasing of business to business professional services: The role of personal relationships. *Indust. Marketing Management* 36(6):709–718.
- Lusch RF, Vargo SL, eds. (2006) *The Service-Dominant Logic of Marketing: Dialog, Debate, and Directions* (M.E. Sharpe, Armonk, NY).
- Lynn SA (1987) Identifying buying influences for a professional service: Implications for marketing efforts. *Indust. Marketing Management* 16(2):119–130.
- Maglio PP, Spohrer J (2008) Fundamentals of service science. *J. Acad. Marketing Sci.* 36(1):18–20.
- Malhotra N, Morris T, Hinings CR (2006) Variation in organizational form among professional service organizations. *Professional Service Firms*, Vol. 24 (Elsevier, Amsterdam), 171–202.
- Mangold G (1987) Use of commercial sources of information in the purchase of professional services: What the literature tells us. *J. Professional Services Marketing* 3(1/2):5–17.
- Mason JH (1992) Innovation in professional services: Potential productivity and trade improvement. *Tech. Forecasting Soc. Change* 42(1):31–45.
- McDonald S (2005) Studying actions in context: A qualitative shadowing method for organizational research. *Qualitative Res.* 5(4):455–473.
- McDonald M, Crawford K (2010) Rail duplication and construction: New Lynn Rail Trench. *CORE 2010: Rail, Rejuvenation Renaissance* (Engineers Australia, Wellington, New Zealand), 637–646.
- Mele C, Polese F (2011) Key dimensions of service systems in value-creating networks. Demirkan H, Spohrer JC, Krishna V, eds. *The Science of Service Systems* (Springer, New York), 37–59.
- Michel S, Brown SW, Gallan AS (2008) An expanded and strategic view of discontinuous innovations: Deploying a service-dominant logic. *J. Acad. Marketing Sci.* 36(1):54–66.

- Miles MB, Huberman AM (1984) *Qualitative Data Analysis: A Sourcebook of New Methods* (Sage, Beverly Hills, CA).
- Miozzo M, Soete L (2001) Internationalization of services: A technological perspective. *Tech. Forecasting Soc. Change* 67(2–3):159–185.
- Mitchell VW (1994) Problems and risks in the purchasing of consultancy services. *Service Industries J.* 14(3):315–339.
- Money B (2000) Word-of-mouth referral sources for buyers of international corporate financial services. *J. World Bus.* 35(3):314–329.
- Morris T (2001) Asserting property rights: Knowledge codification in the professional service firm. *Human Relations* 54(7):819–838.
- Morris T (2008) Professional service firms: The challenges of innovation. Dopson S, Earl M, Snow P, eds. *Mapping the Management Journey* (Oxford University Press, Oxford, UK), 144–163.
- Nahapiet J, Ghoshal S (1998) Social capital, intellectual capital, and the organizational advantage. *Acad. Management Rev.* 23(2):242–266.
- Nam K, Lee NH (2010) Typology of service innovation from service-dominant logic perspective. *J. Universal Comput. Sci.* 16(13):1761–1775.
- Nijssen EJ, Hillebrand B, Vermeulen P, Kemp RGM (2006) Exploring product and service innovation similarities and differences. *Res. Marketing* 23(3):241–251.
- Ordanini A, Parasuraman A (2010) Service innovation viewed through a service-dominant logic lens: A conceptual framework and empirical analysis. *J. Service Res.* 14(1):3–23.
- Ostrom AL, Bitner MJ, Brown SW, Burkhard KA, Goul M, Smith-Daniels V, Demirkan H, Rabinovich E (2010) Moving forward and making a difference: Research priorities for the science of service. *J. Service Res.* 13(1):4–36.
- Payne AF, Storbacka K, Frow P (2008) Managing the co-creation of value. *J. Acad. Marketing Sci.* 36:83–96.
- Pettigrew AM (1997) What is processual analysis? *Scand. J. Management* 13(4):337–348.
- Preissl B (2000) Service innovation: What makes it different? Empirical evidence from Germany. Metcalfe JS, Miles I, eds. *Innovation Systems in the Service Economy: Measurement and Case Study Analysis* (Kluwer Academic Publishers, Boston), 125–148.
- Sebastiani R, Paiola M (2010) Rethinking service innovation: Four pathways to evolution. *Internat. J. Quality Service Sci.* 2(1):79–94.
- Shaw G, Bailey A, Williams A (2011) Aspects of service-dominant logic and its implications for tourism management: Examples from the hotel industry. *Tourism Management* 32(2):207–214.
- Sherer PD, Lee K (2002) Institutional change in large law firms: A resource dependency and institutional perspective. *Acad. Management J.* 45(1):102–110.
- Sood A, Tellis GJ (2005) Technological evolution and radical innovation. *J. Marketing* 69(3):152–168.
- Spohrer J, Maglio P (2010) Toward a science of service systems: Value and symbols. Maglio PP, Kieliszewski CA, Spohrer JC, eds. *Handbook of Service Science* (Springer, Berlin), 157–193.
- Suddaby R, Greenwood R (2001) Colonizing knowledge: Commodification as a dynamic of jurisdictional expansion in professional service firms. *Human Relations* 54(7):933–953.
- Sundbo J (2000) Organization and innovation strategy in services. Boden M, Miles I, eds. *Services and the Knowledge-Based Economy* (Continuum, London), 109–128.
- Sundbo J, Gallouf J (1998) Innovation as a loosely coupled system in services. SI4S Topical Paper 4, STEP Group, Oslo, Norway.
- ten Have P (2004) *Understanding Qualitative Research and Ethnomethodology* (Sage, Thousand Oaks, CA).
- Tuli KR, Kohli AK, Bharadwaj SG (2007) Rethinking customer solutions: From product bundles to relational processes. *J. Marketing* 71(3):1–17.
- Vargo SL, Lusch RF (2004) Evolving to a new dominant logic for marketing. *J. Marketing* 68(1):1–17.
- Vargo SL, Lusch RF (2006) Service-dominant logic: What it is, what it is not, what it might be. Lusch RF, Vargo SL, eds. *The Service-Dominant Logic of Marketing: Dialog, Debate, and Directions* (M.E. Sharpe, Armonk, NY), 1–10.
- Vargo SL, Lusch RF (2008) From goods to service(s): Divergences and convergences of logic. *Indust. Marketing Management* 37(3):254–259.
- Vargo SL, Lusch RF, Akaka MA (2010) Advancing service science with service-dominant logic. Maglio PP, Kieliszewski CA, Spohrer JC, eds. *Handbook of Service Science* (Springer, Berlin), 133–156.
- Vargo SL, Morgan FW (2005) Services in society and academic thought: An historical analysis. *J. Macromarketing* 24(1):42–53.
- Waitakere City Council (2008a) Finance and Operational Performance Committee meeting minutes, Friday, 19 December 2008. Report, Waitakere City Council, Waitakere, New Zealand. <http://www.waitakere.govt.nz/abtcnl/ct/pdf/finopertnl2008/20081219min.pdf>.
- Waitakere City Council (2008b) Notice of meeting: Planning and Regulatory Committee (8 April 2008). Report, Waitakere City Council, Waitakere, New Zealand. <http://www.waitakere.govt.nz/abtcnl/ct/pdf/planregulatory2008/20080408ag.pdf>.
- Waitakere City Council (2009) Notice of meeting: Infrastructure and Works Committee (3 June 2009). Report, Waitakere City Council, Waitakere, New Zealand. <http://www.waitakere.govt.nz/abtcnl/ct/pdf/Infraworks2009/20090603ag.pdf>.
- Winch G, Schneider E (1993) Managing the knowledge-based organization: The case of architectural practice. *J. Management Stud.* 30(6):923–937.
- Yin RK (2011) *Qualitative Research from Start to Finish* (Guilford Press, London).