



SERVICE VALUE IN IT OUTSOURCING

¹Roland S. Padilla, ¹Simon K. Milton, ²Lester W. Johnson

¹Department of Computing and Information Systems, The University of Melbourne, Victoria 3010 Australia

²Melbourne Business School, The University of Melbourne, Victoria 3053 Australia and Faculty of Business Charles Sturt University, Bathurst, New South Wales 2795 Australia

ABSTRACT

Economies are increasingly dominated by the service sector. More than ever, research is needed to address approaches that measure and optimize service. This paper examines service value in IT outsourcing and develops a conceptual framework for a service value model, and addresses the question of how service value is defined within the IT outsourcing context. This paper argues that a clear definition of the concept of service value is of critical relevance in measuring the concept within the IT outsourcing phenomena. The paper is conceptual, and integrates literature on service value premised on Service-Dominant (S-D) logic with literature on the core capabilities of IT outsourcing. Service value research based on the emergence of S-D logic is represented as a conceptual framework that utilizes a holistic lens for viewing the core capabilities in IT outsourcing. Then, for each lens, a diverse set of actors, each with expertise in their capability areas, is used to provide an overview to frame the numerous interactions among the service system entities. It was found that an important emergent theme from the literature is the importance of taking a holistic view, and the systemic nature of interactions among the participants, comprising leaders, monitors, facilitators, contractors, and system thinkers. By having reliable metrics and consistent service, IT outsourcing providers can optimize all the dynamic entities needed to deliver service value. A higher standard of service delivery is more likely to occur as a result of the IT service provider's measurable performance outcomes. The paper develops and utilizes a service value framework that describes how to map service value and its different concepts against the core capabilities of an IT service provider. The paper advances the literature on service science by defining service value in an IT outsourcing context.

KEYWORDS: Service science, service value, Service-Dominant (S-D) Logic, outsourcing.

1. INTRODUCTION

The continued growth of the service economy is having widespread implications on business and society. According to Gartner (Babaie, Hale, Souza, Adachi & Ng 2006), worldwide end-user spending on information technology (IT) services will grow at a 6.4% compound annual growth rate through 2010 to reach \$855.6 billion, with positive growth in nearly all market segments. International Data Corporation (IDC) estimated that global service-oriented architecture (SOA), including consulting, systems integration, outsourcing, application management, support, and training, will continue to have a significant impact on the service economy (IDC 2006). Additionally, IDC forecasts that global spending on SOA-based external services will reach \$33.8 billion in 2010, experiencing an 839 percent increase from \$3.6 billion in 2005. The Australian economy, with an annual growth rate of 3.5 percent will receive further contributions from outsourcing activities stemming from cloud computing, server virtualization, data center optimization, managed security, and the National Broadband Network (NBN) (IDC 2010). IDC's research manager Mr. Matthew Oostveen claims that cloud computing is another disruptive technology that prompts leaders to rethink how they conduct their businesses. Evidence suggests that stakeholders involved in IT service provision, such as academics, service contractors and service contractees, contribute to knowledge creation. From these groups, there is also a common expression of need for further development in

skills and knowledge skills and knowledge to manage the opportunities, and dynamic market growth in the IT outsourcing sector.

A critical enabler of the growth of the services sector is clearly globalization and the information revolution (Basole & Rouse 2008). IT service providers have the opportunity to increase efficiency, effectiveness, and service innovation with enhanced global access to both information and business partnerships. Organizations have found value in IT outsourcing and other means of external services acquisition made possible through the management of noncore capabilities (Bardhan, Demirkan, Kannan, Kauffman & Sougstad 2010; Feeny & Willcocks 1998; Levina & Ross 2003). An increasing reliance on outsourcing both mirrors and drives growth in the service sector.

The rapid uptake of the outsourcing phenomena appears to have outpaced research in the area however. As the significance of the service sector grew, and as services-oriented thinking continued to become a growing paradigm, an academic field now known as service science emerged. Despite the increasing interest in services, there does not appear to be a clear definition of the service value phenomena in the IT outsourcing context. It has been argued that IT service providers can optimize all the dynamic service system entities necessary to deliver service value, made possible by the existence of reliable measurement methods, and service standards (Ostrom, Bitner, Brown, Burkhard, Goul, Smith-Daniels, Demirkan

& Rabinovich 2010). Without relevant and measurable performance indicators, academics researching on, and practitioners of, IT service outsourcing arrangements have little theoretical guidance into how service value can be optimized and measured. New frameworks and contexts must therefore be formulated.

The aim of this paper is to address this gap by exploring how service value is defined in an IT outsourcing context. The paper examines the managerial processes that contribute to, and allow optimization of, service value within IT outsourcing endeavours. In particular, emphasis is placed on the roles of actors and interactions among them. A conceptual framework is derived that summarizes the nature and determinants of service value. The foundations of this framework are the service value core constructs of the Service-Dominant (S-D) logic. The core constructs act as lenses and enable the examination of core capabilities in IT outsourcing.

The structure of the paper is as follows. The next section introduces service value through an exploration of both the historical development of the concept and its current disciplinary perspectives. The core constructs of service science are then discussed to form the basis for analytical discussions in Section 2. Section 3 explores historical and current outsourcing practices and presents sets of capabilities deemed in the literature as being vital for the effective outsourcing of IT. Section 4 describes the research design. Section 5 then uses the broad lenses from Section 2 to define service value in IT outsourcing. Section 6 concludes and discusses future research opportunities.

2. SERVICE VALUE

The aim of this section is to determine the nature of service value within the context of service science. In this section we build upon and advance the discussions by authors such as Spohrer and Maglio (2010b) and Vargo et al. (2010). The process through which this section develops its aim is as follows. First, the historical development of scholarly conceptualisations of service value is presented. Second, the contemporary multi-disciplinarity of service conceptualisations is discussed. Third, the emergence of service science is unfolded, which, in turn, answers the key questions of what are service system entities and what are Goods-Dominant (G-D) and Service-Dominant (S-D) logics. Fourth, the core constructs of S-D logic are examined and their subsequent utilization as service value lenses is explained. Finally, a summary sub-section has been provided.

2.1 Historical Development

Building on the work of Spohrer and Maglio (2010b), we are able to provide an overview of service value's history through its emergence into service science. In his widely acclaimed book, *The Wealth of Nations*, political economist Adam Smith (1776/1904), identified two different types of value: *value in use* and *value in exchange*. Critics of Smith's categorisation of value target the absence of service value and suggest his findings lessen the significance of service activities. Smith's lack of legitimacy toward service value hindered early innovation among service practitioners and researchers (Baumol

2002). As a result, knowledge creation, particularly in the areas of service exchange and value co-creation has been recent. These created insights for academics especially in the areas of exchange and value co-creation. Exceptions include Bastiat's (1850/1996) and Ricardo's (1817/2004) work in the area of value co-creation relationships (defined extensively later in this section).

Growing interaction among economic actors in the twentieth century drove growth in the service sector and defined service systems. Quantitative research with a focus on computer and mathematical modeling of service systems signaled the technical pursuit of service. Service systems are defined as "*value co-creation* configurations of people, technology, value propositions connecting internal and external service systems, and shared information" (Maglio & Spohrer 2008, p. 18). One example of modeling is the Queuing Theory created by Riordan (1962). This theory is a mathematical study of waiting lines that is used to study various service systems such as those within call centres and ambulance emergency dispatches (Fitzsimmons & Fitzsimmons 2007; Mandelbaum & Zeltyn 2008).

Research then turned to technology-based environments of the service value concept (Levitt 1976; Quinn & Paquette 1990). An area of application of such study was self-service technologies (SSTs), which provide convenient, fast and accurate service encounters. Examples of SSTs are the Automatic Teller Machines (ATMs) as well as self-ticket purchasing systems via the internet.

While the concept of service originated within economics, academics from business schools have also explored the managerial implications of service. From a marketing perspective, service was initially characterized as rented goods, improvement of owned goods, and non-goods (Judd 1964). Subsequently, Shostack (1977) suggested that service marketing should be liberated from the confines of product marketing. Shostack's work synthesized diverse concepts during a time when services were thought of as having intangible, heterogeneous, inseparable and perishable (IHIP) characteristics. The growth of service marketing research has been articulated by a number of academics (Berry & Parasuraman 1993; Brown, Fisk & Bitner 1994).

In advancing service research, scholars have argued that literature investigating business-to-business (B2B) service is lacking. Research undertaken on B2B services has been mainly within the context of professional services which are focused on the consulting industry (Maister 1993; Patterson, Johnson & Spreng 1997). In terms of service innovation research, it is claimed that the research is largely client-focused. Client's demands change and providers of service innovation must cope with the change in order to increase value (Spohrer & Maglio 2010b).

Addressing conceptual and definitional issues has also been a research concern. For instance, Edvardsson, Gustafsson and Roos (2005) claim that current service concepts, characteristics, expressions, and perceptions are in need of development. These authors suggest the client's perspective as a new way of viewing a "service portrait". In terms of the service provider's perspective, "offering" is

proposed to encompass both “services” and “goods” (Gummesson 2007). Similarly, Vargo and Lusch (2004) support the use of the singular term “service” to cover both goods and services and, based on this proposition, they also shift the previous Goods-Dominant (G-D) logic thinking towards that of Service-Dominant (S-D) logic.

From Adam Smith’s view of service as a non-productive labour to Vargo and Lusch’s S-D logic, conceptualizations of service have undergone significant evolution over recent history. The concept also varies between disciplinary boundaries and it is to these disciplinary perspectives this paper will now turn.

2.2 Disciplinary views of service

There are a number of disciplines that engage with service, of which most prominent are marketing, information systems, social science, and engineering. The focus of this section however will only be on the marketing and information systems disciplines.

From the marketing perspective, service is viewed as a category of trade that is unique, particularly through its form of delivery. That is, service is distinguished by the so-called “moments of truth” which refers to the unique experience witnessed first-hand by the client. Others define service simply as the transfer of capability from one entity to another (Bitner & Brown 2006; Carlzon 1987; Shostack 1977; Vargo & Lusch 2004).

From the information systems perspective, service systems are also referred to as work systems which are defined as “a snapshot that summarizes, on a single page, the clients, products, services, processes, activities, participants, information, and technology” (Alter 2008, p. 74). Aside from work systems, other fundamentals of service systems include the value chain and service lifecycle (Alter 2008; Checkland & Holwell 1998; Rai & Sambamurthy 2006). With an understanding of historical perspectives and current disciplinary views on service, this paper now turns to a discussion on the emergence of service science.

2.3 Emergence of service science

Service science is defined as an “interdisciplinary effort to understand how service systems interact and co-create value” (Spohrer et al. 2010b, p. 133). Value is co-created directly or indirectly through the engagement with the service system entities. Examples of entities are IT service providers, contact centres, universities, banking services, and internal process transformations (Spohrer & Maglio 2010a). Additionally, the entities have their dimensions of people, businesses, processes, organizations, and technology. There are further instances of service system entities comprising societal units (e.g., individuals, family), organizational (e.g., firms), and economies; however, the discussion now centers on the IT service providers and contact centres.

IT service providers serve a majority, if not all of, their client’s IT portfolio. The provider’s value proposition is to provide a service that is cost-effective and better than the client’s own internal service arrangements (Maglio, Srinivasan, Kreulen & Spohrer 2006). The external vendor’s purpose is to increase their client’s IT operations

at a more efficient and effective level and to decrease unnecessary expenditures in the long term through the integration of specialized skill sets and demonstrated experience. The scope of work (SOW) is typically captured in a contract that details both the client’s and vendor’s expectations and responsibilities. Expectations are documented through a so-called service level agreement (SLA) which are the commitments given by the external vendor. For instance, a commitment may be a response for a technical problem within a 2-hour window. A higher commitment may be to resolve a critical server downtime, to have this operational in, say, no more than 30 minutes. The business relationship between the provider and the client may be initially strengthened or weakened through the SLA engagement; however, there are other responsibilities that need to be met (Bloomberg 2008). Examples are risk management and stakeholder management. IT service providers are typical of service system entities who are increasingly reliant on technology, people, organizations and business (Spohrer et al. 2010b).

Contact centres are utilized by organizations in order to outsource some of their noncore capabilities, such as order-taking and problem-handling (Maglio et al. 2006; Willcocks & Feeny 2006a). Contact centre service systems have four dimensions. First, the people involved are composed of numerous stakeholders with unique motivations. For example, the external provider’s incentive is to increase the number of contact centre seats in order to increase revenue and even profit margins. The client’s incentive may also be to increase the number of seats but to do so at a lower per seat cost. Second, in terms of technology, the increase in number of seats may also prompt the client’s investment for additional IT hardware and software. Third, in terms of processes, calls of simple concerns can be routed from specialists to lesser-skilled operators. Fourth, the information flowing to both higher-skilled and lesser-skilled operators has to be analyzed. The analysis will determine if further training is needed in areas such as communication, client handling and technical knowledge. The integration of these dimensions is essential to have a better understanding for improving service delivery within a contact centre environment (Cheng, Krishna, Boyette & Bethea 2007; Maglio et al. 2006). An appreciation of the theoretical frameworks that surround service systems is also needed.

The Service-Dominant (S-D) logic and Goods-Dominant (G-D) logic are the leading theoretical frameworks for the service system and service science generally. The importance of distinguishing the two schools of thought is necessary for the construction of the analytical framework utilized later in this paper.

G-D logic is the traditional way of understanding the concept of economic exchange. It provides a “view of economic exchange and value creation that focuses on the production and distribution of tangible goods and considers services as special type of goods with undesirable qualities (e.g., intangible, perishable products) or add-ons to tangible products (e.g., post-sale service)”

(Vargo, Lusch & Akaka 2010, p. 136). G-D logic has shifted the perspective of viewing economic activities from goods to services. This is increasingly driven by the dynamics of post-industrialisation where economies can

no longer be best characterized as goods, and therefore are classified as services-dominated. Vargo et al. (2010) argue that the discipline of service science requires a greater type of theoretical foundation which encompasses both services and goods. S-D logic was conceptualized to address this need.

S-D logic provides an alternative perspective for examining exchange. Within S-D logic, service is the primary process for value creation while goods are viewed as means of transport for providing service (Vargo et al. 2004). Additionally, S-D logic focuses on “value-creation as a process that necessarily includes the participation, in varying degrees, of all parties involved” (Vargo et al. 2010, p. 136). It is rooted in ten foundational premises that determine a service-centered framework for investigating numerous exchanges (Vargo & Lusch 2008). The most essential premise states that “service is the fundamental basis of exchange”. This means that the application of operant resources (e.g., skills and knowledge), “service”, is the foundation for all exchange, including for service itself. That is, service being exchanged for service.

2.4 Core constructs of service-dominant logic

The previous sub-section’s discussion of G-D logic and S-D logic concepts hints at a conceptual shift. Service is now the fundamental basis of exchange and as a result G-D logic has become somewhat superseded in the literature. Indeed, as Vargo et al., (2010, p. 141) claim “S-D logic makes service and service logic superordinate to goods and goods logic [and that] transcendence of service establishes a relationship in which G-D logic is nested within S-D logic”. We build upon and advance the discussions by Vargo et al. (2010). This sub-section aims to develop and utilize a service value framework, as illustrated in Figure 1, that will be adapted as a tool in examining the aspects of an IT outsourcing phenomena in Section 5.

Scholars developing the area of service science have created five core constructs comprising S-D logic concepts (Lusch, Vargo & Wessels 2008; Vargo et al. 2008; Vargo et al. 2010): (1) Service – *Serving & Experiencing* and *Relationship & Collaboration*; (2) Value – *Value Co-creation*, *Value-in-Context* and *Value Proposing*; (3) System – *Value-creation Network* and *Symmetric Information Flows*; (4) Interaction – *Open Source Communication* and *Learning via Exchange*; and (5) Resources – *Operant Resources* and *Resourcing*.

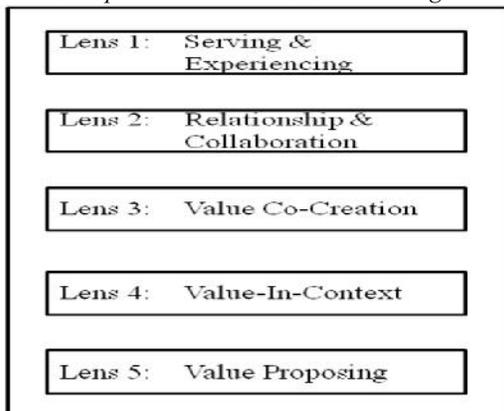


Figure 1 Service Value Framework

Of the above concepts, this paper utilizes the Service and Value constructs and their respective sub- concepts, which will be utilized as tools in examining aspects of an IT outsourcing phenomena in Section 5. The development of a framework responds to requests by academics to establish further means of hypothesis development in advancing service science research (Lusch et al. 2008).

Figure 1 Service Value Framework illustrates each of the service value lenses. A discussion on the lenses proceeds as follows. First, explanations of the respective sub-concepts are presented. Second, the implications, impact, and contribution to service value of each lens is discussed. Finally, the lenses are discussed with respect to their contribution to the measurement and optimization of service value.

Lens 1: Serving & Experiencing

The traditional definition within the G-D logic of ‘serving & experiencing’ relates to the transfer of ownership, or production of output, to clients (Lusch et al. 2008; Vargo et al. 2010). By comparison, S-D logic focuses on the interaction rather than the output transfer, among the service systems comprising service providers and clients. This interaction, which is a collaborative process between the provider and the client, is referred to as the serving and experiencing process. During the provider’s serving process, the client engages in experiencing the service. It is observed that Lens 1’s interactive process, of serving and experiencing involving provider and client, relates with Lens 2’s collaborative notion as well.

Service value within Lens 1 is defined as the process of providing benefit rather than intangible goods, where value is determined from a phenomenological and contextual viewpoint (Vargo et al. 2010). This implies that in serving the needs of the client, the interaction that occurs with the IT service provider generates an experience within the client’s distinctive context and motivations for the exchange. For example, a S-D perspective within an airport environment would focus on understanding the passenger’s (client) experience of the check-in procedures, on the experience of the airport clerk (service provider) spending an average of five minutes per passenger issuing boarding passes and checking luggage, and on the experience of undergoing a full body search at the security point. The method of phenomenology, by which the service provider observes the subjective experiences of the client, emphasizes the importance of how the clients behave and perceive matters within a certain context such as in an airport environment.

Lens 1 further provides an insight that IT service providers need to more clearly identify, define, and measure the factors contributing towards client value. Recent evidence from service scientists called for research in capturing value in use for services and communicating value to clients through the creation of innovative tools (Ostrom et al. 2010). It is argued that optimization and service value measurement is still at its infancy stage. Service value optimization requires the ability to analyze the information involved during the serving and experiencing process created by the interaction between the client and the IT service provider. The process further highlights the need for better analytics and optimization

tools, to communicate value with the clients (Fitzsimmons et al. 2007). The tools require optimization approaches involving statistical methods that capture value within the client as well as the IT service provider's environment. Only after institutionalizing service value metrics and optimization will practitioners and scholars ultimately capture and communicate value among the stakeholders.

Lens 2: Relationship & Collaboration

While *Serving & Experiencing* relates to the interaction among service systems including clients and IT service providers, *Relationship & Collaboration* highlights the interdependence of the service system entities (Vargo et al. 2010). The S-D logic notion of relationship refers to the give-and-take exchange of service-for-service. By comparison, the G-D logic view of exchange refers to mere transaction of resources comprising goods and services where the manufacturer or value producer provides the resources to the client or value consumer. This process contradicts the *Value Co-creation* concept which has been recognized as a significant catalyst towards the notion of exchange within service systems (Maglio et al. 2008). The S-D logic is arguing that the service-for-service exchange implies not only a give-and-take relationship, but also a greater collaborative form of interaction that now considers both the producer and the consumer of value. Additionally, the increased collaboration among the service entities is claimed to not only increase the depth of relationship but also leads to the emergence of new ones. This process of increased collaboration and generating new relationships within service systems seems to be compared metaphorically with biology's cell division. It is further argued that for service science to ultimately advance, S-D logic must consider the relational aspects not only of the IT service providers and the respective clients but also the other entities.

The previous paragraph implies that service value within Lens 2 is defined as the process of providing service-for-service among service system entities, where value is simultaneously consumed and produced. As an example, an accounting service provider was contracted by a university to provide a service for generating monthly financial statements (F/S) for a period of one year. Within the S-D notion of *Relationship & Collaboration*, the service provider both provides and consumes the F/S services. While this may appear illogical, it is made possible by the value co-created in collaboration with the university. The value created from the university side is in the form of suggestions, opinions, and constructive feedback in relation to the F/S services. Based on the university's output, the provider receives and consumes the value provided. The S-D notion argues that with the process of increased *Relationship & Collaboration*, there are even further associations in addition to the development of greater insights. In relation to the above example, it would be possible for the F/S service provider to have an extended contract period and even have additional referrals through word-of-mouth.

The case mentioned highlights challenges for both the service providers and the clients. Again, research has articulated the need for further investigation to address the lack of measurement methods and optimization tools

within service organizations. Means of creating further value, measuring value, and communicating significance to clients are issues in need of resolution for service providers. In practice, the business generated by the F/S service provider is captured through the provider's own accounting system which is then communicated within their organisation. While this is evident, the value resulting from the collaboration with the university is not captured. There are no analytics or other sophisticated tools that the service provider's management could utilize for decision-making.

Lens 3: Value Co-Creation

Value co-creation is the key concept that is responsible for enabling and establishing the principles behind the interaction, relationship development and exchange (Spohrer, Vargo, Caswell & Maglio 2008). According to Spohrer et al (2008) service systems employ three main processes in order to create value: (1) value proposition, (2) proposal acceptance, and (3) proposal realization. Value proposition, which relates to Lens 5, briefly refers to the notion that the client is argued to act not as a consumer of output, as produced by a service provider, but as an amalgamator of the numerous resources existing within the service system. Proposal acceptance refers to the recognition of the value created. The client's realization of the value proposition occurs during the exchange. Service value is claimed to occur when at least two of these service system processes occurs. (Vargo et al. 2010).

In addition, *Value Co-creation* suggests that value created through exchange is based on the reciprocal relationship existing among the entities in the service system. This further implies that the respective entities (IT service provider and client) proposes, accepts, and realizes value based on the phenomenological and contextual standpoint as described in Lens 1. The co-creation of value is argued to not only integrate the current and additional knowledge and resources but also considers the impact that the environmental context has on the service system (Vargo et al. 2010).

Relevant research has highlighted *Value Co-creation* within an IT outsourcing example (Lusch et al. 2008; Vargo et al. 2004). The service level agreement's contents, comprising scope of work, escalation procedures, and risk management, are typically made known through time, and through continued interaction within the service system. Both the client and the IT service provider's expectations and motivations are considered in order to simultaneously create value. The provider is not capable of supplying value by themselves. The collaboration with the client allows the co-creation of value if acceptance of the proposition occurs.

The above example implies that IT service providers do not secure greater revenues by providing more of their outputs to their clients, but rather from increasing service value - made possible through co-creation. Furthermore, the example highlights the necessity for organizations to objectively track the scope of work rendered, to measure response time, and to optimize interactions. Ostrom et al. (2010) argue that service value goes beyond just monitoring these discrete metrics. Service value

measurement and optimization finds a middle ground, including skills, operating costs, capabilities, and technology investment, among the entities in the service system.

Lens 4: Value-In-Context

Lens 4 accentuates the “phenomenological and experiential conceptualization of value” (Vargo et al. 2010, p. 147). This means that *Value-in-Context* emphasizes the significance of time and place dimensions as well as critical variables that affect value creation and value determination. A number of contextual variables are uncontrollable, though potentially influential, in business interaction (Vargo et al. 2010). It is important to highlight at this stage that previously perceived exogenous variables, comprising legislative, political, market and environmental changes, are not only assimilated in the value creation process but are now increasingly depended upon by the service system entities.

As an example, a commuter airline prides itself on customer service, with features such as provision of complimentary wine, a copy of a local newspaper, and lounge access. An insight secured from the *Value-in-Context* definition is the improvement of service provision. The airline service provider’s perspective would have to increasingly consider now, as a particular instance, the environmental influence of climate change in relation to customer service. What then are the implications of managing this phenomenological standpoint? This viewpoint again brings to light the challenge of accurately capturing, analyzing, and measuring the value secured from the service process involving the external factors. An additional insight is how to harmonize and optimize the numerous interactions among the airline’s entities, comprising vendors, clients, human resources provider and maintenance service provider, in addressing a particular issue on customer service.

Recent research highlights that service innovation integrates the notion of client co-development (Edvardsson, Gustafsson, Kristensson & Witell 2010). It is argued that the client has a central role in service innovation and production. Clients, who are now having a central role, are embedded within the service production. Take the case of an automobile purchasing decision. The majority of leading automobile providers have an online presence. Web contents, typically comprising features and specifications, are now increasingly provided with a customisation interface that allows a client to choose the color, model, price, delivery schedule, and eventually, the realisation of securing the automobile.

In addition to further research on the relationship of service innovation with *Value-in-Context*, scholars suggest that complexity, which inarguably exists within the service system, should not be overdone (Chesbrough & Davies 2010). It is argued that clients and service providers require only sufficient amount of information in order to accomplish the service exchange.

Lens 5: Value Proposing

Value Proposing states that “organizations do not produce or even deliver value; they can only propose value and, if the proposition is accepted, then, with the participation of

the client, co-create value” (Vargo et al. 2010, p. 148). Value is composed of both cost and benefits that are revealed only when the client interacts with the resources of the external provider.

The orientation of the G-D logic is to view service as an output, similar to goods. Service value is then an output *delivered* to the client. This further highlights G-D logic’s value-in- exchange where organizations are driven by generating more input with the intended outcome of increasing market share. Unlike the G-D perspective, S-D logic recognizes that an organization cannot create and deliver value. These organizations can only co-create, and therefore, propose value.

Maglio and Spohrer (2008) claim that the notion of value propositions integrate the internal and external service systems within the value chains or value-creating networks. Research on the traditional notion of value networks claim that the concept is based on the premise that organizations are embedded in a complex environment comprising of numerous interactions among organizations (Easton 1992). This claim seems close to those of S-D, however, the traditional value chain claim does not have dyadic relationships. It is argued that value chains have now evolved to what is now referred to as value networks (Allee 2000; Bovet & Martha 2000; Kothandaraman & Wilson 2001). Value networks are characterized by complex interactions among numerous actors, delivering value to the primary or the non-primary clients. Similar to Lens 3, the value network notion is a part of an even larger organizational unit that co-creates value (Stabell & Fjeldstad 1998).

Given the complexity of service value networks, service organizations are again faced with a need for value measurement and optimization. Service providers seek metrics that encompass relevant business units that directly and even indirectly relates to the service exchange, solutions to the integration of the essential roles of the numerous participants, and communication of the value co-created with the client. These are just some of the many challenging questions that academics and practitioners seek to resolve in the area of service science.

2.5 Summary

This section has determined the nature of service value within the context of S-D logic. It has shown that the nature of service value is as follows. First, the concept within the five lenses, comprising *Serving & Experiencing, Relationship & Collaboration, Value Co-creation, Value-in-Context, and Value Proposing*, are overlapping and are not sequential. The interactions existing among the numerous service system entities continue to evolve. Second, this section has validated the claims made by service scientists that service value literature within the S-D logic is limited. Additionally, this section has contributed a service value framework in response to requests in the literature to further develop theoretical foundations of service science. Third, it has been further observed that empirical study, which is beyond the scope of this paper, is necessary to validate the problem statements or real world possibilities as stated within the respective lenses. Fourth, service value continues to evolve as it interacts and co-creates value

within entities in service systems. In addition, service value is argued to be embedded not only within a particular service system but is observed to have an essential role in operating within a larger network. Fifth, the process of examining service value and enabling *Value Co-creation*, influences service innovation. New forms of services are developed as continued collaboration occurs among the entities. Finally, while there is continued evolution occurring with regard to relationships, generation of new entities, interaction with other systems, consideration of participant's motivations, and integration of exogenous factors, the service value process only highlights the lack of the essential measurement and optimization methods. Metrics have been further observed to be necessary tools for both practitioners and researchers to guide the development of service science. It is with this same intention of discovering new phenomena emerging from particular contexts that the discussion of this paper proceeds. However, prior to defining service value within the IT outsourcing context in Section 5, the next section initially explores the specific capabilities within the mentioned environment, and eventually, identifies the IT outsourcing framework.

3 IT OUTSOURCING

The aim of this section is to identify an appropriate IT outsourcing framework (see Figure 2). The analyses resulting from the IT outsourcing framework and the service value framework (see Figure 1) shall be unfolded in Section 5. This section's discussion proceeds as follows. First, background on the history of and research into outsourcing is presented. Next, a number of client and service provider capability sets are presented before one specific capability set, referred to as the IT outsourcing framework, is selected and further expanded for the purposes of this paper. Finally, a summary has been provided that also articulates a number of phenomena as well as insights observed from this section's discussion.



Figure 2 IT Outsourcing Framework

3.1 Background

For nearly two decades, researchers have been heeding the call of academics to generate relevant literature in relation to the phenomena of IT outsourcing. The terms "IT Outsourcing", already connotes a number of terminologies. IT refers to information technology infrastructure which is defined as the "internal organization of people and resources devoted to computer-based systems...[involving] both the tangible equipment, staff, and applications and the intangible organization, methods, and policies by which the organization maintains its ability to provide system services" (Markus 1984, p. 22). Others define IT as the value, comprising people and/or physical resources, proposed by a service provider that addresses particular aspects of the client's environment (Loh & Venkatraman 1992a).

Outsourcing was viewed as a buzzword in the early 1990s (Wilder 1989). Since then, there have been other terminologies (e.g., insourcing, sourcing, business process outsourcing, intermediaries, and service providers), used that are directly and indirectly related with the outsourcing term. Further variations of the terminology include application service provision, freelance outsourcing, and rural sourcing (Lacity, Khan & Willcocks 2009). Outsourcing as defined by some academics refers to a make-versus-buy (Loh et al. 1992a) decision faced by a client within manufacturing (Walker & Weber 1984), sales (Anderson 1985), procurement (Masten, Meehan & Snyder 1991), and distribution (John & Weitz 1988) environments.

Scholars have further argued for additional perspectives. More recent viewpoints by academics argue that specific characteristics of service level agreements, provided by IT service providers, positively impact the governance structure of a client's organization (Goo, Kishore, Rao & Nam 2009). Others approached outsourcing by arguing that there is a correlation between software outsourcing agreements and business familiarity, referring to relationships and trust (Gefen, Wyss & Lichtenstein 2008). Such arguments already highlight the role of service value within the IT outsourcing environment. Further discussion of this phenomena is revealed in Section 5. Additionally, Levina et al. (2003, p. 332) define IT outsourcing as "a phenomenon in which a user organization (client) transfers property or decision rights of their information technology (IT) infrastructure to an external (provider) organization".

The earliest academic coverage of outsourcing, in the early 1990s, detailed large outsourcing programs of specific organizations. For instance, Applegate and Montealegre (1991) report on the Eastman Kodak Company whose outsourcing efforts spawned growth in the sector. In another case, Huber (1993) reports on one of the largest banks in the US, the Continental Bank, deciding to focus on its core mission of serving business clients by outsourcing many of the bank's in-house services, including IT (Huber 1993). As outsourcing became more widespread, so too did the number of qualitative and quantitative studies on the phenomenon (Loh et al. 1992a). In particular, there was much research focus on the costs and benefits of outsourcing (Lacity & Hirschheim. 1993; Willcocks & Fitzgerald 1993).

Since the Eastman Kodak case, academic research has generated a number of insights into the reasons for outsourcing (usually due to cost reduction, lengthened operation times, access to resources, and a focus on strategic decisions), areas outsourced (usually found to be an organization's IT infrastructure), and methodology for outsourcing (usually found to be through formal procedures) (Dibbern, Goles, Hirschheim & Bandula 2004; Lacity et al. 2009). It is claimed that harmonious collaboration among stakeholders, sound contract facilitation & monitoring, adherence to processes, organizational willingness and sound strategy are key determinants for a successful outsourcing implementation (Cullen, Seddon & Willcocks 2005; Feeny et al. 1998; Teng, Cheon & Grover 1995; Willcocks & Lacity 2006b).

In addition to the above research, Lacity et al (2009) conducted an in-depth literature review of the IT outsourcing practice. They found six commonly researched topics synthesized from 191 research papers and found that the most number of articles focused on the determinants of IT outsourcing followed by IT outsourcing strategy, IT outsourcing risks, determinants of IT outsourcing success, and client and supplier capabilities. Of these six IT topics, this section will further focus on client and supplier capabilities, which is the most relevant topic for this paper's scope. In this context, capabilities are defined as "a distinctive set of human resource-based skills, orientations, attitudes, motivations, and behaviors that have the potential, in suitable contexts, to contribute to achieving specific activities and influencing business performance" (Willcocks et al. 2006a, p. 49). The capabilities definition provides practical implications. For instance, clients are in need to seek, adopt, and develop relevant capabilities that successfully engages IT outsourcing providers.

Capabilities can be differentiated according to the roles of actors in an organization with the service provider, the client and technical capabilities most notable. From the service provider perspective, the most essential capability is the IS human resources management capabilities (Beulen & Ribbers 2003; Gopal, Sivaramakrishnan, Krishnan & Mukhopadhyay 2003; Oshri, Kotlarsky & Willcocks 2007; Rao, Poole, Raven & Lockwood 2006). Also, where the service provider personnel turnover is low and the optimal allocation of human resources is possible, then higher IT outsourcing outcomes occur for the client. Gopal et al (2003) found that organizations sustain better relationships with partner businesses if they retain their trained and experienced staff.

From the client perspective, service provider management capability determines the success of the client's business (Al-Qirim 2003; Cross 1995; Michell & Fitzgerald 1997; Ranganathan & Balaji 2007). For example, Cross (1995) discusses how BP Exploration Company's management decided not to secure their IT requirements from a single provider with the intention of safeguarding against nonflexible services and fee increases. The BP policy was to contract their IT services to numerous service providers and receive the disparate services as if they came from a single provider, which they hoped would result optimal service delivery. This

approach also allows service providers to collaborate with one another.

From the technical perspective, clients and service providers should share and collaborate in the development of process standards (Davenport 2005). Technical, within this context, relates to processes, standards, and methodologies. One globally known process standard, which was developed by the Carnegie Mellon Software Engineering Institute, is called the Capability Maturity Model Integrated (CMMI) that specifies what processes must be in place to achieve the five levels of software development maturity (Rottman & Lacity 2006). By setting standards in place, organizations are more likely to improve both their internal as well as outsourced processes. Organizations without process standards are forced to undertake more unnecessary collaboration than those with existing process standards (Rottman & Lacity 2004).

Based on the abovementioned perspectives, Lacity et al (2009) claim that client and service provider capabilities are optimized if there is a "mix of complementary capabilities". Others in the literature also advocate the utilization of such a capabilities mix. Feeny and Willcocks (1998) were the first to deal with this issue and identify nine core IS capabilities: (1) leadership; (2) business systems thinking; (3) relationship building; (4) architecture planning; (5) making technology work; (6) informed buying; (7) contract facilitation; (8) contract monitoring; and (9) vendor development. Levina and Ross (2003) place three critical capabilities in their mix: (1) IT personnel career development; (2) methodology development and dissemination; and (3) client relationship management. In their capabilities mix, Feeny, Lacity & Willcocks (2005) identified the twelve most significant and interconnected activities that clients seek from providers: (1) planning and contracting; (2) governance; (3) organizational design; (4) leadership; (5) business management; (6) client development; (7) domain expertise; (8) behavior management; (9) sourcing; (10) process re-engineering; (11) technology exploitation; and (12) program management.

Of the three capabilities sets, Feeny and Willcocks' (1998) original model is argued to be the most extensively-referenced and well-regarded paper in relation to the topic on mix of complementary capabilities. In fact, Lacity et al., (2009) argues that the model has had profound impact with organizations. The paper has been cited 336 times based on a recently conducted literature review on IT outsourcing. A recent version has been updated in Willcocks and Feeny (2006a), integrating the challenges and lessons learnt from Dupont. Based on the Feeny and Willcocks (Feeny et al. 1998; 2006a) model, this sub-section now turns to the details of the core capabilities framework.

3.2 Core Capabilities Framework

Managers face numerous organizational challenges that are a result of ever-changing client requirements, market conditions and the need for competitiveness. Given these challenges, there has been increasing reliance on information technology. A number of authors have suggested the continued dependence on IT that is

necessary to increase an organization's competitiveness. For instance, it is argued that IT firms have to comply with the "eight imperatives" that are a combination of both the organizational goals as well as necessary preparations to achieve those goals (Rockart, Earl & Ross 1996). Others argue that long-term competitiveness is made possible through utilization of three IT assets, namely: strong staff, a reusable technology base, and collaboration between management and IT (Ross, Beath & Goodhue 1996) and similarly, there are those who argue that an organization's core competencies as well as probable IT outsourcing have to be fully exploited (Feeny et al. 1998). Essentially, in order to fully take advantage of IT, an organization needs to focus on its core IT capabilities which are defined as "a capability needed to facilitate the exploitation of IT, measureable in terms of IT activities supported, and resulting business performance" (Willcocks et al. 2006a, p. 49).

Initially, exploiting IT was not without challenges. Three main challenges existed: developing and integrating business and IT vision, delivering IT services and designing IT architecture. These challenges were then treated within three research strands: CIO's role and experiences, target capabilities within the organization and IT outsourcing. Of these three strands, the CIOs were much more interested in exploiting IT outsourcing. Emphasis was placed on managing the relationship with the service providers as well as fully utilizing the required capabilities. As a result of this, a framework (see Figure 2) has been identified that contains nine core capabilities (Feeny et al. 1998; Willcocks et al. 2006a).

1. **Leadership Integrates** IT effort with business purpose and activity. Key people of an organization define its structure, process, culture and direction. During particular activities, the leaders continuously collaborate with other key stakeholders to secure a common IT vision. These interdependencies are managed to achieve common goals.
2. **Business Systems Thinking** ensures that IT/IS capabilities are envisioned in every business process. Business systems thinking is the capability of the firm's managers to conceptualise and envision how the diverse IS/IT designs are to be interfaced with the firm's business process. The business system thinkers then communicate and integrate their views into the firm's business process reengineering, strategic development and IS/IT delivery.
3. **Relationship Building** facilitates the wider dialogue, establishing understanding, trust, and cooperation amongst business users and IT specialists. It involves a wider collaboration of numerous stakeholders belonging to the business and IS community. This capability bridges the apparent gap between users and technical specialists by providing harmony, communication and accountability.
4. **Architecture Planning** creates the coherent blueprint for a technical platform that responds to present and future business needs. The architects are to determine the appropriate technology trends. These trends will then be considered and integrated into the organization in order to operate at a suitable platform. Architects then draft the plan into a platform that is

referred to as IT infrastructure (Broadbent & Weill 1997).

5. **Making Technology Work** means rapidly troubleshooting problems that are being disowned by others across the technical supply chain. Design and delivery of IS services is one of the core capabilities to make technology work. The troubleshooters not only provide a rapid fix but also identify and even recommend the business requirements that are not normally observed by the firm's stakeholders.
6. **Informed Buying** is the analysis of the external market for IT/IS services. Informed buying overlaps the three challenges. The informed buyer considers numerous information sources such as market conditions, business requirements, technology concerns, contract management, and service management. The analysis is important to objectively determine the reasons and strategy for implementation.
7. **Contract Facilitation** ensures the success of existing contracts for IT services. The contract facilitator provides a single interface between the organization and its external providers. Conflicts and issues are typically resolved at this level of capability.
8. **Contract Monitoring** protects the contractual position of the business, both currently and in the future. While the contract facilitator is responsible for the daily concerns of complying with the contractual obligations, the contract monitor is responsible for making the external providers accountable for the current contract as well as for meeting any appropriate industry or market standards.
9. **Vendor Development** identifies the potential added value of IT/IS service providers. The vendor developer's intention is to improve further relationship with the external service providers in order to add value. This in turn benefits the provider as well by providing additional services that adds value that also leads to revenue increase.

3.3 Summary

This section not only achieved the aim of identifying an appropriate IT outsourcing framework but also identified a phenomena emerging from the discussion. Evidently, the selected core capabilities framework have been observed to display process of interactions, relationships, collaborations, interdependence, and *Value Co-creation* within the IT outsourcing context. These processes are similar to service system environments. In addition, the capabilities framework has been observed to suggest the presence of participants or actors in the process. The actors, with the purpose of identifying them for the next section, are as follows: (1) Leaders; (2) Thinkers; (3) Builders; (4) Architects; (5) Technologists; (6) Buyers; (7) Facilitators; (8) Monitors; and (9) Developers. The specific roles, as well as the dynamics of interactions, of these actors shall be made apparent in Section 5.

We now have two frameworks: service value (through the lenses in Figure 1), and IT outsourcing (through the core capabilities in Figure 2). The analysis, at this stage, shall now proceed by merging the two frameworks. Section 5 follows the analysis by providing the

methodology and a discussion of the phenomena as a result of the merged frameworks. The phenomena will finally conclude with a definition of service value in the IT outsourcing context.

4. RESEARCH DESIGN: Service value in IT outsourcing

So far this paper has introduced two important concepts: service lenses in Section 2 and IT outsourcing capabilities in Section 3. These two discussion strands are now weaved together to form this paper's aim of defining service value in IT outsourcing. Using a conceptual research design, each of the nine IT core capabilities selected from Section 3 will be analyzed with the service value lenses selected from Section 2. Researchers suggest the following guidelines for writing qualitative research questions (Creswell 2009). First, ask one or two central questions, followed by five to seven sub-questions. The sub-questions narrow further the study's topic but still leaves open the intention of delving further into the research. The sub-questions may also be used during interview sessions with the targeted organizations and relevant participants. To reiterate, empirical work is beyond the scope of this paper. If an empirical work is to be conducted in the near future, this paper has already articulated that metrics and optimization tools are to be developed extensively for capturing and analyzing service value. Second, relate the main question to the specific inquiry's qualitative strategy. The question addresses the case's description and any broader idea arising from the research. Third, begin the research questions with the words "what" or "how". Fourth, focus on a single phenomenon that will eventually evolve in greater richness of details. Fifth, use exploratory verbs such as the utilization of "define" or "explore a process" which may signal a case study approach or a conceptual paper. Sixth, expect that the research question evolves and will be subject to frequent reviews. Seventh, use open-ended questions to prompt for further details. Lastly, specify the participants and the research site for the study. A target area or a specific group is needed for a narrowing down of analysis.

Other researchers suggested further techniques, comprising examining the literature, seeking opinion from peers, applying to specific contexts, and defining the aim, in determining a suitable research question (Neuman 2006). An initial research focus is made by considering particular concepts (e.g., service value) within specific theoretical frameworks (e.g., S-D logic), and in definite contexts (e.g., IT industry). The research question is for a conceptual study that utilizes "define" as its action word. Given this, the question has been framed to define service value within the IT outsourcing industry.

For possible empirical work by interested academics in the near future, it is further argued that practical limitations such as budget, schedule, resources, ethical concerns, specialization and ethical approval by authorities has to be considered in determining the research question (Neuman 2006). Budget may involve the cost of setting up an interview through utilization of mobile phone calls, internet, or data usage and even letters through post. Scheduling the interviews will be a huge task as well due

to the disparate time availabilities of the individuals. Access to the service providers or other entities' confidential information, including monthly revenue reports, sales, and marketing strategy, may be seen as a future constraint as well. The author may be faced with the need to use an organization's financial information. Approval to gain access to this type of information from the managers and/or their respective supervisors may be anticipated as a limitation.

The primary research question is:

How is service value defined within the IT outsourcing context?

At this stage, the paper has methodically arrived at a relevant research question. The next step is selecting a particular method that will address the research question. "Research methods" typically consist of data collection, data analysis, interpretation, write-up, and validation (Neuman 2006). Others discuss "research approaches" as experiments, simulations, surveys, case studies, and phenomenological studies (Creswell 2009). Still others suggested factors, comprising relevance, framework, purpose, research cycle, and approach, for the research approach selection (Shanks 1993). Additionally, others suggested three factors for selection: (1) type of research question, (2) extent of control an investigator has over actual behavioral events, and (3) the degree of focus on contemporary as opposed to historical events (Yin 1989). Other scholars used an "exploratory qualitative study" to investigate particular concepts (Parasuraman et al. 1985, p. 43). Finally, other academics suggested to draw together relevant reviews of literature as a way to test the hypothesis or address the research problem (Evans et al. 2002).

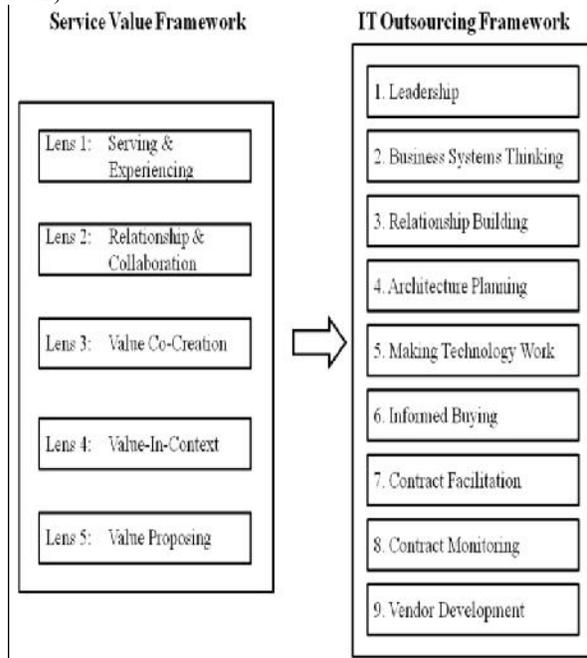


Figure 3 Service Value in IT Outsourcing

In consideration of the abovementioned views, this paper selects a conceptual method towards addressing the research question. The tools to be used are in the form of "lenses". Specifically, the lenses are contained within

Figure 1's service value framework. In addition, another framework is to be drawn in as well which is Figure 2's core capabilities. Figure 4 illustrates the way that the method shall be applied. It is through this application that the next sub-section's discussion will turn.

A particular method has just been selected, argued, and justified. Prior to proceeding with the results obtained by using the chosen method, this paper describes first the manner in which the method will be applied, followed by the rationale. The method proceeds with the utilization of the lenses within the service value framework and views each of the capabilities within the core capabilities framework (see Figure 4). For instance, Lens 1 (e.g., *Serving & Experiencing*) examines the 1st core capability on leadership. The analysis will look at process, participants, gaps, and insights. Furthermore, Lens 1 will proceed in examining the 2nd core capability on business systems thinking. The same level of analysis will occur between each lens and each capability.

This type of method was developed, and eventually utilized due to a lack of suitable conceptual frameworks in relation to service value within S-D logic. Additionally, this particular method is utilized because it provides a clear structure of methodically approaching a seemingly complex concept of service value within S-D logic and deconstructing the IT outsourcing phenomena into its core capabilities. Structuring the framework, as seen in Figure 4, and treating the lenses as analytical tools serve to provide a clear and systematic way of approaching a complex conceptual research problem such as the case of service value and IT outsourcing.

5. RESULTS

The paper has methodically structured a research design that identified the research question, argued for a conceptual method, and described the application of the framework. It is now time to present and analyze the results. The results of comparing each lens with the IT outsourcing core capabilities are presented in the following sub-sections. Conclusions based on the results are then drawn and discussed in the following section.

Lens 1: Serving & Experiencing→IT Outsourcing Core Capabilities

While it is claimed that S-D logic focuses on the interaction between various service systems, it is the IS leaders who are responsible for formulating the numerous organizational arrangements, such as planning of processes, workforce and business. The relevance of the interaction among systems is not found in the ownership of output such as a business plan, but rather in the interaction itself. The leader's focus is in serving their respective stakeholders such as their clients, upper management and partners. The stakeholders are then required to participate in experiencing the service rendered.

Aside from the leaders, the business system thinkers are also responsible for understanding the interdependencies of business activities. In particular, the thinkers envision how their major IT service providers will be included as a partner in their business initiatives. Mutual benefit exists where the service recipient (e.g.,

business system thinkers) benefits from the provider's participation through additional IT consultation or the generation of enterprise architecture (EA), and the vendor benefits through a probable increase in revenue and a better client relationship. Relationship considerations should not only be applied to single contact points between client and service providers, but to all relevant stakeholders within these organizations.

EA provides a blueprint or a design prior to integrating the numerous components of IS outsourcing endeavours. The architect develops a plan through their engagement with the service system entities such as the IT service providers (e.g., service providers) and the internal process (e.g., technology and business directions). Upon completing the relevant components, the architect serves his organization through the design and delivery of the IS service. The users (e.g., management, technical personnel, and even clients) participate through experiencing the IS service.

Informed buying allows an organization to manage their procurement prior to the delivery of an IS service. The procurement process involves the interaction with numerous components, comprising researchers (e.g., protection from technology obsolescence), contract facilitators (e.g., leading the bidding process), and IT service providers (e.g., managing the service process), within the IT outsourcing service system. The informed buying process allows the buyer to serve one of the many service systems (e.g., organization's users) through sourcing the most suitable goods and services that is in accordance with the organization's business goals.

After the procurement process, contracts need to be facilitated. Contract facilitation involves the interaction of numerous service systems such as the recipients of external and internal service agreements and the key people responsible for ensuring that conflicts are resolved within the contractual relationship. The contract will stipulate the service provider's aims to increase the efficiency of the client's operations and expectations for performance.

While the contract facilitator ensures the day-to-day activities adhere to the contract, the contract monitor guarantees that the organization's business situation is protected at all times. The interaction of the contract monitor with the service providers ensures that the latter delivers higher or at par industry performance standards. The benchmarking provides the clients with the necessary benefits such as the positive experiences (e.g., better performance) generated from the interactions with the service systems.

Lens 2: Relationship & Collaboration→IT Outsourcing Core Capabilities

Relationships & Collaboration implies that the involved parties are concurrently acting as both 'consumers' and 'producers' of value. This is the S-D logic belief that service is constantly exchanged for service signifying reciprocity and interdependence. As an example, the client's leaders manage the interdependencies of processes (e.g., IT governance procedures), people (e.g., users), information (e.g., financial statements), business (e.g., strategic plans), and technology (e.g., Software-as-a-

Service). Software-as-Service (SaaS) refers to software such as accounting applications that are delivered through the internet. Service systems become increasingly interdependent which results to better relationships and greater collaboration.

The business systems thinkers have clear objectives of integrating the organization's IT capabilities in relation with the business. For example, the thinkers have to consider the IS/IT investments to support the organization's current processes or even to provide new processes to meet future demand. The thinkers understand the interdependencies among the various systems and offer a uniquely holistic perspective of the organization's processes.

The relationship builder creates greater communication channels among the service system entities. Enhanced collaboration results in developing the user's appreciation of the SaaS, increases access and generation of the financial statements and enhances the efficiency of the governance procedures. Relationship building can also address the gap claimed by researchers to exist between users and 'techies' (Feeny & Willcocks 1998). Greater collaboration increases the harmony, accomplishment and reciprocal assurance among all stakeholders.

The architect secures the insights from the leaders, thinkers and builders and ensures the integration and adaptability of the technology adopted forming the foundation for the organization's collective IT sharing. Growth in sharing increases the specialisation as well as the interdependence of each entity. For example, as the users become more proficient with the applications, the users become mutually dependent with the application, resulting in the software's upgrade or even customisation.

While the architects are more concerned with insights into technology as well as ensuring that the organization adopts a robust technical platform, a technologist adopts a shorter-term and a more practical attitude in ensuring that a particular technology works. Within the context of the innovation process (Rogers 1995), a redefining or modification of the technology innovation may be required. The modification requires increased collaboration with the service systems. Feeny et al (1998) identifies 'technical fixers' as those who troubleshoot problems and identify business requirements. Through networking, this entity enables collective action to problem-solving and innovation. Informed buying involves the interaction of the buyer with service systems such as the application service provider (ASP) and users. The entities involved are said to be both consumers and producers of value. Given this situation, the ASP delivers the service (e.g., an accounting application) which in turn is consumed by the finance department. Simultaneously, the ASP consumes the service (e.g., monthly-usage fee) produced from the organization. This is the reciprocal and mutually beneficial service-for-service relationship.

The service-for-service relationship allows the contract facilitator to function as a single point of contact (SPOC) between service systems such as the users and the service providers. Most problems are resolved at SPOC level. As the interdependence of the users and providers

increases, the collaboration with the SPOC increases as well.

Contract monitoring provides the onus with the service providers in terms of contract compliance and performance standards. The contract monitor has to consider the relationship not only between the client with the service provider but also between the clients and industry. For instance, in terms of the service standard, there has to be a certain level of response time for a particular service downtime. The expected standard allows a service provider to improve itself. The improvement may be resolving a certain service issue within 1.5 hours when the industry standard is at 2 hours.

Lens 3: Value Co-Creation →IT Outsourcing Core Capabilities

While Lens 2 discussed the interdependence of each service system, Lens 3 discusses the creation of value through exchange. Leaders are responsible for formulating the service plans. These plans go through distinct stages, such as the proposal stage, the management stage, the acceptance stage and the realization stage. At least two of the stages are to occur in order for *Value Co-creation* to occur. Further stages involve the thinker assimilating operant resources (e.g., knowledge) from the business units, technology and processes. This knowledge is then utilized to generate insights into making the company better, that is, of creating greater value.

The builder ensures wider communication between the business and the stakeholders. Value- co-creation does not focus solely on a particular beneficiary who will be the decision maker on value; rather, value is now co-created from each service system. The buyer and service provider may have different motivations for making particular decisions, but these motivations need to be consolidated.

The architect generates operant resources as well from the service providers, technology and business direction in order to arrive at a service platform. The new knowledge secured allows the architect to create a more comprehensive and better architecture. For example, the architect proposes a partnership agreement with the service provider. If the provider accepts the proposal and both the provider and the client realise the proposal, each service system mutually benefits from the agreement.

The service proposal is aimed to function as comprehensive reference of action. The continuous collaboration of the various service system entities intends to fill any gap with the service platform. This implies that value is co-created among the entities such as the troubleshooters, users and the architect. Their interaction allows for faster and more effective resolutions of service problems.

The buyer manages the organization's IS/IT sourcing strategy. In managing this, the buyer interacts with the service provider, the leader, and the architect. The interaction provides relevant contribution from each system. This then leads into a more objective and more comprehensive sourcing activity.

The facilitator, while acting as the SPOC, ensures that there is interaction and relationship development among the service systems. Determiners of value now are not just the facilitator's organization but also the service

provider's. Each system is to decide if the exchange of the contractual concerns is valuable or not.

While the monitor's value is safeguarding the organization's business interests, *Value Co-creation* involves the other service systems (e.g., service provider) as well. The service provider's perspective is secured also if the contractual terms are mutually beneficial. In vendor development, clients look beyond the current commitments and explore additional value. Both the client and the service provider are to benefit and create value. For example, the provider increases its revenues while the client experiences increased benefits.

Lens 4: Value-In-Context →IT Outsourcing Core Capabilities

While the previous sub-section focused on value creation, this sub-section refocuses S-D logic away from value creation and towards the distinctive value obtained from a particular service system. *Value-in-Context* now considers exogenous (e.g., temporal, geographic, political, legislative and environmental) factors in determining the value creation process.

Within the *Value-in-Context* concept, leaders are not only faced with managing the numerous interdependent service systems but they also have to consider external factors in business decisions. For instance, leaders now need to consider a range of environmental implications in their IT related decisions (Josefsberg, Belady, Bhandarkar, Costello & Ekram 2009).

The thinkers, having a holistic view of the organization, are to envisage newer behavioral patterns during their interaction with the various service systems. Within the context of an accounting firm, an accounting application that is being leased from a certain service provider will be of higher value to the firm during the tax season as compared to during the Christmas season.

The relationship builders are responsible for getting the organization constructively engaged in the IS/IT initiatives and for bridging any culture gap among users and technology implementers. The builders are now to consider the phenomenological and experiential situation of developing the relationships among the service systems. With the intention of establishing harmony and mutual confidence among stakeholders, the builder considers increasing the social relationships through teambuilding activities and brainstorming sessions.

Architecture planning creates an appropriate design. The architects are to secure insights not only from the interactions among the people, service providers and technology, but also integrate their decision-making with all relevant external factors in the value creation process such as government regulations.

In making technology work, technical advancement is achieved through the implementation of a more practical approach. Practical orientation is in line with *Value-in-Context* in that the process of value creation integrates sensible variables such as network relationships. Within a complex multiple vendor environment, there are so-called technical "fixers" who immediately and effectively troubleshoot technology problems that are often disowned by the traditional supply chain. This practical or "quick-fix" context already creates value in the process.

Informed buying not only leads the tender process and selects a sourcing strategy but also analyzes the external market trends that may affect the business. For instance, Green IT initiatives may affect the buyers sourcing decisions. The buyer may have to shortlist vendors who are compliant with the said initiative. The shortlisted service providers are envisioned as being able to contribute value to the business.

The contract facilitator secures insights on what factors are to be considered in order to resolve any contractual issues. The factors to increase the efficiency of the facilitation process may be as pragmatic as implementing a procedure. For example, a client complaint may be escalated to the facilitator if the issue relates to a contract breach committed by a service provider. If the issue is not service affecting or critical, the matter may just be resolved at the complainant's respective business unit.

Contract monitoring exploits the external market (e.g., Green IT) for IS services-related impact. In the process, the monitor ensures that the resources (e.g., government laws) which are often uncontrollable are integrated by all service systems (e.g., clients, organizations) in the value creation process.

The added value of IS/IT service providers are determined within the vendor development core capability. *Value-in-Context* highlights the relevance of time, place and network relationship dimensions in the value creation (Vargo et al. 2010). The contextual nature of co-created value suggests integrating the service provider's circumstances as well such as change in management staff and new procedures.

Lens 5: Value Proposing→IT Outsourcing Core Capabilities

Value propositions integrate external and internal service systems within service value networks or value-creating systems (Maglio et al. 2008). Organizations do not generate and/or distribute value; rather, they can only propose value. This means that if the service provider's proposition is accepted, *Value Co-creation* occurs with the client's participation.

The organization's sourcing strategy claims that firms outsource to obtain cost advantages from the assumed scope and economies of scale that characterises the service providers (Ang & Straub 1998; Loh et al. 1992a; Slaughter & Ang 1996). While this is true, alternative theories claim that the sourcing decisions are motivated instead by institutional (Ang & Cummings 1997; Hu, Saunders & Gebelt 1997; Loh & Venkatraman 1992b) or political factors (Lacity & Hirschheim 1993).

There are further claims that strategic intent and technical capability contribute towards interpersonal relationship development and contract structure (Willcocks & Kern 1998). For instance, the service provider possesses added value in terms of technical leadership. These may be tapped to increase the client's core capabilities. In addition, there are claims that service providers can deliver value by developing a set of 'experience-based core competencies' such as addressing client requirements and the market situation and demonstrating complementarities resulting in efficient

service delivery (Levina et al. 2003, p. 352). The *Value Proposing* concept recognizes that value consists of the disclosed costs and benefits as the service provider's internal assets are integrated with the client's (Vargo et al. 2010). The thinkers are responsible for conceptualizing the service provider's IT designs. The designs are to be proposed and, if the proposition is accepted by the other actors, value co-creation occurs.

6. DISCUSSION AND CONCLUSIONS

The paper introduced the notion of two frameworks consisting of service value and IT core capabilities. The service value framework consists of *Serving & Experiencing*, *Relationship & Collaboration*, *Value Co-creation*, *Value-in-Context*, and *Value Proposing*. The IT core capabilities framework, on the other hand, comprise of actors including leaders, thinkers, builders, architects, technologists, buyers, facilitators, monitors, and developers.

A conceptual framework, including service value and IT core capabilities, was developed to test the hypothesis or primary research question. The research method commenced by utilising the service value's Lens 1, and viewed the nine IT core capabilities. The application presented and analyzed the results. Based on the results, this paper can now justify a number of definitions for service value in an IT outsourcing context:

1. Service value in IT outsourcing is defined as a process of complex set of interactions, comprising emerging relationships, collaborations, *Value Co-creation*, phenomenology, and value proposition, not only within the entities (e.g., organisations, businesses, processes, participants, technology) but also a process of further complex interaction with other networks.
2. A service value network in an IT outsourcing context is defined as a systemic nature of interactions among the actors (e.g., leaders, thinkers, builders, architects, technologists, buyers, facilitators, and monitors) with other entities of the service system.
3. Service value creates, maintains, and evolves interdependencies, reciprocity, and increased collaboration among the entities.
4. Value is co-created among the numerous actors as service-for-service exchange occurs within the IT outsourcing context.

The derivation of these definitions spawned numerous insights that will be discussed in the next and final section. It is important to highlight some consistent themes that emerged from the process of determining the nature of service value, identifying the IT outsourcing framework, and defining service value in the IT outsourcing context.

First, it is evident that there is lack of research in relation to the study of service value in the IT outsourcing context. Organizations have increasingly found value in the service-for-service exchange particularly in IT outsourcing. However, the research in this area does not meet demand expectations. Additionally, there is increasing reliance on the management of non-core capabilities by external service providers. It is with hope that continued collaboration between service providers and the academic world occurs in order to generate new

insights, provide additional theories, and present practical solutions to the challenges faced in the areas of service value and service innovation.

Second, it is apparent that the utilization of a holistic lens magnified further the complex and systemic nature of interactions among the numerous service system entities, comprising organizations, participants, processes, technologies, and businesses. Additionally, there were service value challenges as well as opportunities faced by the entities. It was further observed that the core capabilities framework implied the presence of participants who increasingly collaborate, form emerging relationships, co-create value, and value propose within a complex system of service value network.

Third, leading to the process of defining service value in IT outsourcing, there is a noted consistent need for additional focus on the lack of essential measurement and optimization methods. Service value optimization requires the ability to analyze the information involved during the interaction process among the service system entities. The service-for-service exchanges among the entities highlighted the need for metrics, optimization tools, and better analytics.

6.1 Practical Implications

The paper provides business practitioners and academics with an understanding of the impact and application of service value in IT outsourcing environments. Important findings based on the discussion is as follows. First, is measurement. Metrics must integrate the critical roles of actors, technology, processes, businesses, and organizations in creating better value towards their clients. Second, is optimization. The IT outsourcing actors need find a middle-ground for the numerous participants within the service system entity to use any business analytics and optimization tools and communicate value across the organization.

6.2 Limitations

Certain limitations in the study are acknowledged. First, the definition is limited to the IT outsourcing context. Other environments within the outsourcing phenomena, such as software outsourcing, business process outsourcing, could have been compared as well. Second, this is a conceptual study. An empirical study, with data collection from numerous participants and within the IT outsourcing industry, would have produced more reliable findings.

6.3 Future research

The proposed service value framework (Figure 1) provides a conceptual model in an area where little prior research has been undertaken. It is based on the S-D logic of service science, as its theoretical framework. The findings in this conceptual research suggest that service value is difficult to capture, analyze, and communicate within organisations without the presence of measurement and optimization tools. The lack of empirical research in this field means that there is little guidance on how to measure and optimize the collaborative view among business practitioners in IT outsourcing environments, and academics from multi-disciplinary perspectives. Only by

doing that, we will be on our way to increasing our knowledge and understanding of service value within numerous organizational contexts.

In conclusion, the conceptual study reported in this paper offers a definition concerning service value in an IT outsourcing context. The research revealed that service value in IT outsourcing is a complex process of interactions, not only between entities within the service system, but also including other networks. The research also revealed a lack of measurement and optimization methods. The major contribution of the research is a conceptual service value framework that will assist in empirical research and hopefully gain the attention of both business practitioners and academics.

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