An exploratory study of the role of extra-organisational collaboration in the creation of new business value

Brett Rodney Milne
Southern Cross University
An Exploratory Study of the Role of Extra-Organisational Collaboration in the Creation of New Business Value

Brett. R. Milne
Declaration of Originality

I certify that the substance of this thesis has not been already submitted for any degree and
is not currently being submitted for any other degree or degrees. I certify that to the best of
my knowledge any help received in preparing this work, and all sources used, have been
acknowledged in this thesis.

Brett Milne, 14 February, 2017
Dedication

This thesis is dedicated to the passion of my wife and children, whose belief in my ability to complete the challenge I set myself has been an ever-constant reminder and encouragement to keep pushing through the barriers and blockers that threatened its completion. Thank you for the many hours of solitude spent reading and writing that we could have spent together.
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Abstract

Technology and market disruption and the rapid globalisation of markets has delivered a business environment ripe for new management ideas and constructs, providing significant substance from which researchers, academics and practitioners have been able to define new ways of building business value. While there has been significant research undertaken on the dynamics of the firm and the roles of and between firms in the evolving global economy, organisations are seeking guidance on practices and methodologies that help them create sustainable competitive advantage through the creation of new business value.

Central to the success of large vertically integrated firms was the introduction of a staged gate product development process, utilising internal teams of experts collaborating to create new value opportunities.

Unlike the response to disruption witnessed in the telecommunications industry, the historical nature of the incumbent firms in many industry do not have a heritage or the specialist capabilities, knowledge or resources to explore and deliver new customer value. Many incumbent firms, have evolved to provide their core service offering as efficiently as possible, thus maximising the value to be gained from existing service offerings. The ability of the incumbent businesses to embrace new forms of value creation, including partnering and collaboration models will be a central determining factor in their long-term viability.

This increased specialisation or focus of firms and the global nature of markets require firms to explore new ways of working and collaborating to enable the efficient and effective creation of new business value. The pressure on firms to respond to the forces of industry and market disruption and a lack of capability to create new business value from within, is compounded by the new consumers who have stressed a desire to become more active in the process of value creation.
Building on the co-creation approaches discussed under S-D logic, the process of creating value under this model assumes that no one firm has the capability or resources to efficiently or effectively create the value on their own. Business collaboration and participation in co-creation have become necessary capabilities of the modern firm and this area has become a fertile ground for researchers to develop models and understanding that can assist firms to continue to build new business value that provides them with some sense of competitive advantage.

Following a detailed review of the relevant literature and the value creation experience gained in his professional career, the author has formulated a value creation model proposed in this research thesis that introduces the role of extra-organisational collaboration as a framework for establishing cross firm teams tasked with creating new business value as a critical starting point in understanding how firms engage with each other and the customer.

The model examines the role of the customer, the customer firm and the supplier firm/s in the process of building new business value. The research explores the phases of a collaborative exercise to ensure the establishment of the agreed starting point, appropriate collaborative governance and value sharing outcomes. The role of the “Hub” firm and the collaboration coordinator are discussed in-depth and their importance to the success of the value creation exercise defined. A search of the relevant literature showed that, while the issues around the need for greater collaboration have become topical, the creation of a framework to support the establishment of cross firm collaborative teams is an area of knowledge that needs greater analysis.

The research methodology employed uses a non-random selection of value creation exercises that have been presented as case studies in the thesis. The case study research design will allow the specifics of the Extra-Organisational Collaboration model to be examined against
real world examples and provide a better understanding of the ways in which the model can be applied. The cases presented in the research are all cases in which the author was a central participant and were selected to test the concepts defined in the model and provide evidence that there is a need for firms to develop a robust framework for engaging members of their extended business network together with the customer groups in a co-creative process identified in this thesis as Extra-Organisational Collaboration.
**Glossary of Terms**

Stage Gate Process: The Stage-Gate process is a methodology used in new value creation which consists of a series of stages where essential activities of the value creation process are carried out. The stages are complemented by gates (or decision points) where interim achievements are evaluated. The specific activities performed in each stage gate depend on which stage the project is in.

Business Collaboration: The interaction between two or more organisations in a defined process to achieve an agreed commercial outcome.

Value Creation: The process of taking a series of inputs and creating a product, technology, service, or experience for consumption by consumers that will generate some form of commercial return for the creators.

Value Creation Exercises - the specific activities undertaken by firms and their partners to create a specific new value element, for example a new product and services.

Value Creation Process - the activities and actions taken by a firm during the management of a value creation exercise.

Business Networking: An activity where the members of organisations and firms meet top form relationships and to recognise, create or act on opportunities to build new business value, share information or lobby policy makers.

Co-creation: Co-creation is an initiative to bring different parties together (for example companies, customers, academics, etc) to jointly realise a mutually held objective.

Competitive Advantage: A condition, capability or constraint that provides one firm a position of superiority over rival firms.

Firm Based Economic Models: The theory of the firm consists of a number of models and frameworks that describe or predict how a firm will behave or the firms structure or its relationship to the market.
Service Dominant Logic (S-D) Logic: S-D Logic proposes that firms, markets and the broader community are primarily concerned with the exchange of value derived from services, which are built up from the competencies of the firm.

Hub Firms: These firms possess a specific set of technical or customer skills and the ability to motivate and form relationships with other firms and actors who have other skills, resources and abilities critical to the process of co-creation

Collaboration Collaborator: The collaboration coordinator actively manages the process of collaboration by clearly defining the broader outcome of the value creation process, actively engages others in the process of collaboration and holds themselves and others involved in the collaboration accountable for the outcomes.

*Business Value* – the value created by a business or group of business that can be monetised with customers
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CHAPTER 1

INTRODUCTION
Chapter 1 – Introduction

1.1 Introduction

The creation and delivery of business value is the central task of all organisations. Increased specialisation and greater consumer access to information has arisen as an outcome of globalisation and technology and is altering the approaches used by firms to create new business value.

Continually developing new forms of business value is a strategic imperative for business in markets that now stretch around the globe. Previously, organisations had extensive control over the amount of information available to consumer and the resources required to drive new value creation. The internet has altered the access and number of sources of information available to consumers. The move to greater specialisation of firms away from vertically integrated all-encompassing business models requires businesses today to interact with other firms to successfully create business value. Davis and Eisenhardt (2007) suggested that relationships between firms are basic to the way in which industries operate, are organised, and therefore, play a central role in industry innovation and new value creation.

Value creation thinking evolved largely from the exchange models of economics, with a dominant focus on the making, mining or farming of goods. The inherited view of value, was that value was somehow imbedded into the goods during the creation process. The development in understanding of the role of the consumer in the identification and assignment of the embedded value in the services and intangibles that surround the product has weakened the argument that value is intrinsic to the good created. Vargo and Lusch (2004) in their analysis of services suggested that the evolving nature of businesses and the provision of intangibles and services has created a new dominant logic for how value creation was being delivered. According to Vargo and Lusch (2004, p12) “a service-centred
perspective disposes of the limitations of thinking of marketing in terms of goods taken to the
market, and it points to opportunities for expanding the market by assisting the consumer in
the process of specialisation and value creation”. This service centred approach, reframed as
Service Dominant Logic or S-D Logic brings together an eco-system of participants
interested in combining resources, skills and knowledge to create new business value. Vargo,
Maglio and Akaka (2008) argue that under the S-D logic notion of value co-creation the
value is not created or perceived until the goods and services are used. The users experience
and emotional engagement in the offering are essential elements in the determination of the
value offered. Consumption of the offering (a combination of goods, services and intangibles
offered by several participants) defines the underlying construct of value co-creation.

S-D Logic identifies two types of resources directly engaged in the co-creation of value:
“operand and operant resources: operant resources, such as people and businesses, operate on
operand resources, such as technology (using tools) and information (symbolic processing)”
(Maglio and Spohrer 2013, p666). Lee, Olson and Trimi (2012) suggest that the evolving
nature of co-creation as described under the S-D Logic is beyond a single economic entity or
firm and a more open innovation model that provides a compelling experience is necessary.
Open approaches to innovation “includes engagement, experience, and co-creation of value
that is difficult to imitate by competition” and is “built on principles of convergence of ideas,
collaborative arrangement, and co-creation of experience with stakeholders” (Lee, Olson and
Trimi 2012, p824). A move towards a greater use of collaborative value creation requires the
development of effective models and processes to enable firms to facilitate the successful
deployment of collaborate value creation. Cass and Ngo (2012, p133) argue that “Importantly
our theory and measures provide guidelines for management practices in firms seeking to
develop capabilities to deliver superior value. Indeed, the role of value creation appears to be
one of growing managerial importance and focus for many firms and there are many
examples that can be found in the media and literature related to firm utilising specialist capabilities to create specific value for customers”. The identification of a move towards greater collaboration suggested that delivering repeatable value creation outcomes would be key for future business success.

The Extra-Organisational Collaboration model has been proposed to describe the processes followed by customer and supplier firms as they collaborate, sometime with customers, to create business value for delivery to the customers of the customer firm. The model developed from the extensive experience of the author working in a variety of industries and firms creating new business value. During the author’s career, the process of creating new business value evolved from firms controlling all the skills and resources required to create new value to an environment where the engagement of partner firms with specific skills and capabilities was necessary for the successful creation of new business value. The model identifies and describes key roles within a collaborative process that enhance the achievement of a successful collaboration. The process of forming and executing successful collaborative activity is also defined in detail, increasing the opportunity for firms to create long term business success.

In a more specialised, interactive business environment where customers have become more engaged in the process of value creation firms will need to become expert at creating and participating in collaborative partnerships to maintain or create competitive advantage. Rayport (2011, p.1) highlights that “innovation, is perhaps the most valuable activity in business, and depends critically on the kind of cross-pollination of ideas that collaboration enables.” In their work on innovation through collaboration, MacCormack et al. (2007, p.16) propose that “investments to build capabilities, in collaborative capability (emphasis added), created options to pursue strategies that could not be replicated by competitors; especially those that managed collaboration like outsourcing. For these firms, collaboration had become
a source of competitive advantage”. The extra-organisational collaboration model forms a key framework for accessing and developing the skills and capabilities that enable sustainable competitive advantage to be developed.

The research will utilise case study examples from the author’s professional experience to provide a more definitive explanation about the 1) nature of the relationship between collaboration partners, 2) the location and stimulus for new value ideas, 3) the role of business networks in identifying and sourcing collaboration partners, and 4) the internal models employed by the firms to manage extra-organisational collaboration.

1.2 Background to the Research

The literature review identified that a change in the structure and nature of the relationship between customers, customer firms and supplier firms was occurring and that the change was altering the way business value was conceived, defined and created. According to Ramaswamy and Gouillart, (2010, p246), “business and society are moving toward an individual- and experience-based view of co-creative engagement among individuals and institutions – outside and inside enterprises.” The concept of Extra-Organisational Collaboration was conceived by the author following analysis of the literature and distilling years of extensive practical experience, creating business value, across a range of industries and firms as a possible description for the evolving approach to value creation.

The research will incorporate both business to business and business to consumer literature, as the nature of Extra-Organisational Collaboration brings together business networking and collaborative value creation relationships that exist between firms within a business to business construct and the concepts of customer co-creation and S-D logic that discuss the value creation relationship between firms and end consumer in a business to consumer
construct. Extra-Organisational Collaboration provides an intersection of these two bodies of theories within the specific environment of value creation.

Preliminary analysis of the literature indicated that extensive work had been undertaken to define the nature of the interaction and roles of customers and customer firms, Parasuraman (1997) proposed that maintaining an understanding of customer value was critical but difficult because it was dynamic and subject to change over time. Anderson and Narus (1998) in their work on customer value define the concept of customer value models, which can be used by suppliers to determine the worth of their offerings to customers consistent with S-D Logic. Pralahad and Ramaswamy (2004, p 31) suggested that “the meaning of value and the process of value creation are rapidly shifting from a product and firm-centric view to personalized consumer experiences. Informed, networked, empowered, and active consumers are increasingly co-creating value with the firm”. Anderson (2007) claims that the evolution and ubiquity of technology based tools is converting the consumer from being a passive consumer of services to an active producer of value, or “Prosumer”, thereby utilising a firm’s technology to create their own value, for example creating an itinerary on an online travel site which was once very much the domain of the travel agent. Tapscott and Williams (2008) have argued that prosumers are creating value for everyone, not just for their own use and they are sharing it globally with other consumers. These new active consumers or “Prosumers” are mainly different from other consumers because “they want to be personally engaged in co-creating value” (Ramaswamy & Gouillart, 2010, p.5). Izvercianua, Seran and Branea (2014, p.) support the concept of prosumers and suggest that “alongside prosumers companies can co-create value which differentiates their offer from competition and establish a relationship of trust and involvement which determines consumer recommendations and influence in the market.”
This analysis identified limited research had been undertaken that described or defined the roles, interactions and processes employed by customer firms and supplier firms as they jointly set about creating new sources of business value. This concept is supported by Davis and Eisenhardt (2007, p13) who claim that “comparisons of successful and unsuccessful collaborations show that generating collaborative innovations depends not only on appropriate design conditions (e.g. governance form, social embeddedness) as suggested by prior literature, but also on using appropriate organisational processes that lead relationships over time”. Chesbrough (2003, p1) argues that the traditional methods of innovation, where firms owned and managed the resources of innovation and “adhered to the following philosophy: successful innovation requires control “are being replaced by new approaches to innovation where companies partner or interact with other firms to commercialise innovation”. He goes onto argue that in the “new model of open innovation, firms commercialise external (as well as internal) ideas by deploying outside (as well as in-house) pathways to the market. Vargo and Lusch (2011, p182) point out what becomes possible “once we have normalised the actors (1) cross-fertilisation among what have been fragmented sub-disciplines and (2) a better vision of the collaborative, systematic nature of value creation and the implications” for business. According to McColl-Kennedy et al (2012, p371) “almost all treatments of co-creation of value seem to imply that it is not a homogeneous process but rather one for which there can be multiple approaches”. The model of Extra Organisational Collaboration was developed to describe and explain the changing dynamics of value creation and to provide firms with a reference for the design of a collaborative co-creation endeavour.

1.3 Justification of the Research

In business, the creation of new business value is essential for the medium to long-term survival of the firm in competitive global markets. Businesses that seek to evolve and adapt have the best long term prospects because “only companies that constantly challenge what
they do, challenge themselves to come up with new and different ways of doing things, and constantly improve on things that they already do will survive in this new globally competitive environment” (Balasubramanian, 2013, p1). Williams (2011, p8) says that “the goal for any organisation – no matter what the size – should be to generate a steady stream of new recipes-ideas that alter the trajectory of the business and revive stagnant markets or completely reinvent the competitive dynamics of an industry”. The inability of businesses to remain relevant to customers and their market results in market share and shareholder value being eroded away and ultimately the very existence of the business is threatened. While other issues, such as cash flow management, operational efficiency and effectiveness are also important to the ongoing survival of the firm, the ability for a firm to innovate and develop new or more effective sources of business value will enable the firm to follow a path of continued growth and prosperity. Charan and Lafley (2008, p1) highlight the importance of innovation to firms when the stress that “the company that builds a culture of innovation is on the path to growth. The company that fails to innovate is on the road to obsolescence”.

The move to greater levels of collaborative value creation will require firms to institute processes and capabilities that can offer predictable and measurable value creation outcomes. Extra-Organisational Collaboration is a model which endeavours to provide a process for developing skills, capabilities and milestones that would assist firms to build replicable value creation activities. Repeatable value creation experiences will ensue that the costs of value creation and the success of the process can be managed in an effective manner. The research is important for three reasons. First, the research remains focused on the long-term success of both customer and supplier firms in a competitive global market. Much of the prior research has focused on the relationship between the firm and the interaction with its customers. While this customer – firm relationship is an important body of knowledge, understanding the
broader dynamic as to how a series of firms in a collaborative partnership combine their resources to create value that sustains the customer relationship is important and overdue.

The processes whereby collaborative partnerships are established, managed and assessed is another area where little research has been undertaken. This second reason for undertaking this research is important because it will help to expand on the body of knowledge in this area. The large part of research in this area has focused on the formulation of business relationships as an outcome of managing the efficiency and effectiveness of operational endeavours, with little emphasis placed on the role innovation and value creation play in motivating firms to form collaborative partnerships. While research has been conducted on joint value creation (Dyer 1997, Gulati 1998, Tsai Wenpin and Ghoshal 1998 Dyer and Singh 1998, Dagnino and Padula 2002, Dhanaraj and Parke 2006, Lesser 2009, Gobillot 2009), this research has been more focused on the transactional nature of rather than the creative nature of the relationship. Dyer and Chu (1997, p29) proposed “that trust creates economic value in exchange relationships” and is central to reducing the transaction costs of innovation.

Dagnino (2011, p31), in explaining his analysis of inter-firm collaboration, identifies the interaction as the establishment of “coopetition that emerges and comes to light from a condition that we may define of partial congruence of interests” utilising the opportunity of interest congruity to reduce transaction costs. Vargo and Lusch (2011, p181) in suggesting that the market operates as a system and that “all parties (e.g. businesses, individual customers, households, etc.) engaged in economic exchange are similarly, resource integrating, service-providing enterprises that have a common purpose of value (co)creation”. The intent of the model of Extra-Organisational Collaboration presented in this theory is to describe the dynamics of the relationship rather than the external view of benefits that arise from operating collaboratively with other firms and customers to create new business value.
The final area of the research tests and refines the Extra-Organisational Collaboration model within the context of business value creation and innovation. Many of the innovation and value creation partnership models have been centred on the ability of the firm to reduce costs or extend existing resources. Business collaboration built around the Extra-Organisational Collaboration model would be undertaken with the clear purpose of building knowledge and developing value that all parties participating in the collaborative process would be able to access for long-term economic gain.

1.4 The Problem Statement/Research Methodology

The most important questions of this research focus on defining and understanding the processes for formation, management and structure of relationships between customer and supplier firms as they collaborate to manage the process of business value creation, innovation and knowledge creation. Any single instance of value creation, the creation of new knowledge, products or services that can be monetised with customers, pursued by a single or group of individuals or a single or group of firms can be defined as a value creation exercise. The process of value creation is the range and flow of activities that individuals or firms undertake to create new value during a value creation exercise. The model of Extra-Organisational Collaboration provides a framework for understanding the way in which firms come together to create new business value during a value creation exercise.

The research questions listed below identify the focus of the study.

1. What drives firms to develop new business value?

2. How and why do customer and supplier firms currently form collaborative partnerships and relationships?
3. What role does the extended business network of key business managers play in the identification, sourcing and establishment of extra-organisational collaborative partnerships?

4. How are successful value creation exercises coordinated within a process of Extra-Organisational Coordination?

5. What are the key phases of a value creation process using the Extra-Organisational Collaboration model?

The unit of analysis for this research is the firm. Firms are an easily recognisable and most common form of economic entity interacting with consumers in the value exchange process of supplying goods and services. Firms play a significant role in the creation and realisation of new business value. The research has identified two distinct types of firms, those primarily involved with customer service and management of the customer relationship and those primarily involved with the production and delivery of products and services. Customer firms have a primary set of capabilities more aligned to delivering customer service outcomes. This research will use a non-probability sampling technique, convenience sampling (Davis, 2005), to select the value creation exercises and the associated firms involved in the value creation. Using an embedded case study design with supporting qualifying analysis to identify any emergent themes enables an analysis of the Extra-Organisational Collaboration model to be developed. While value creation is a recognised phenomenon, an understanding of inter-firm collaborative processes and motivations is less well understood, the Extra-Organisational Collaboration model attempts to provide some definition around an evolving value creation process. The collection of data will be based on notes, artefacts and recollections of the author who has actively participated in extensive value creation activities in a range of organisational constructs and organisational models.
1.5 Outline of Thesis

This thesis follows the standard five-chapter structure as developed by Perry (1998). Chapter 1 outlines the problem being investigated, proposes the existence of the role of Extra-Organisational Collaboration in the process of value creation, the importance of the study and the research questions.

Chapter 2 reviews the existing literature as it relates to the parent disciplines of the theory of the firm, the theory of value creation, the theory of business collaboration and the theory of co-creation and the immediate discipline of extra-organisational collaboration. Discussions within these disciplines expand on the topic of creating business value through the processes of collaboration. Chapter 3 of this thesis is a description of the methodology and procedures to be used to conduct the research. This chapter includes information about the research design, data collection and analysis, survey instruments used and how the research is conducted.

Chapter 4 reports the findings of the research. This section of the thesis describes the research findings as they relate to the role of extra-organisational collaboration in the process of creating business value.

Chapter 5 summarises the previous four chapters and discusses the highlights of the research. Conclusions are drawn from the research findings and recommendations are made for future research. Figure 1.1 provides a diagrammatic outline of this thesis.
1.6 Limitations of Scope and Key Assumptions

There are five limitations to this research. First, the research is only being conducted from the perspective of a single organisation and its partner firms, so any organisation cultural issues that might affect extra-organisational collaboration will only be examined from the perspective of the firms involved in the creation of three new value opportunities. As all these firms were involved in the provision of information and communications technology solutions, broader applicability across other industries will require further research.

Second, the research will be based on a small sample of customer and supplier firms involved in value creation whose involvement in the examples of value creation will be used to inform the case studies. While every endeavour will be made to uncover all the issues relating to extra-organisational collaboration it is possible some key data will be missed. Third, existing research on co-creation is limited owing to the lack of information readily available regarding
the activities and behaviours of small and medium size enterprises and the commercial advantage created by developing a proficiency in co-creation reducing the willingness of firms to discuss their experiences in co-creation (Bryman, 2003). The fourth limitation relates to the limited research on extra-organisational collaboration as defined in this thesis. Finally, this thesis did not attempt to examine all business and collaboration models. Several models were examined and are presented in the following chapters.

1.7 Ethics Approval

Ethics approval for this research work was obtained from Southern Cross University in 2010. This research project develops a series of case studies that examines the processes and benefits involved in the establishment and management of extra-organisational collaboration as a key approach to the creation of business value. Participant firms chosen to provide the data from which the case studies were be developed were sourced directly from the author’s personal network of business contacts. Interviews and conversations were conducted with members of the participant firms to validate the author’s personal notes, recollections and assumptions. The research examines the actions of senior managers in firms that either operates mainly as a customer serving business or as a product/service supplying business. As the author was engaged in activities described in each of the three case studies the analysis will be framed as a participant-observer.

The case studies will be qualitative in nature and as the selection of the cases was based on the author’s participatory experience the use of probability sampling was not considered an issue. The author as an executive director of technology firm BW played an active part in the operations of the business and actively participated in the value creation exercises detailed in the cases either as leader of the firm or a subject matter expert. This research will contribute to the knowledge of the processes that enable business collaboration in the pursuit of new
business value. This research will increase the knowledge in the areas of creating new 
business value, the internal and external factors which influence the choice of value creation 
processes, the choice of possible partners, and the process for measuring if the strategy was 
successfully execute.

1.8 Conclusion

This chapter has introduced the problem of extra-organisational collaboration as a process for 
creating business value as research questions investigated in this study. An outline of the 
thesis was also provided. Chapter 2 follows with a review of the literature which elaborates 
on several topics including the role of the firm, the concept of co-creation, the concept of 
business value and the role of business networks.
CHAPTER 2

LITERATURE REVIEW
Chapter 2 - Literature Review

2.1 Introduction

An investigation into the role played by Extra-Organisational Collaboration in the creation of business value, as was identified in the research problem described in Chapter 1, is discussed. Chapter 2, the literature review, discusses the problem areas identified in the literature search and knowledge gaps that this study will address through the research questions and analysis.

In Section 2.3, the study and review of the literature will commence by examining the contributing discipline of the Theory of the Firm (Clarke, 1985; Terry and Forde, 1984). The analysis of the contributing discipline of the firm identifies the history of the firm as it has evolved and the different viewpoints attached to its reason for existing.

To provide a context for this study in which value creation is a key reason for the existence of the firm, Section 2.4 will examine how the concept of value creation is central to the firm’s relationship with its customers and a mechanism to ensure the firm’s ongoing survival.

Section 2.5 will examine the emerging role of the consumer in the process of value creation and discuss the contributing discipline of co-creation. This section will also examine how a deeper understanding of S-D logic has framed the role of co-creation in the creation of new business value. The nature of co-creation is affecting the way in which organisations apply their scarce resources leading to a change in the structures and nature of business and markets.

Section 2.6 will discuss the immediate discipline area of business collaboration and how these processes and activities have evolved as the central role of the firm has changed. The section will also discuss how network structures are evolving as core contributors to the
processes of value creation and how this has impacted the ability of firms to manage all the activities of the value chain (Mandell, 1999). The need to access skills and resources external to the firm has produced several management dilemmas that will be examined through the literature.

Section 2.7 introduces the proposed business model of extra-organisational collaboration created from this analysis. From these discussions knowledge gaps are identified as research questions to be discussed. The conclusions of the literature review will be summarised in Section 2.8. The contextual model framing this chapter is displayed in figure 2.1.

**Figure 2.1 Contextual Framework Guiding Chapter**

![Contextual Framework Guiding Chapter](image)

*Source: Developed for the research*

**2.2 Rationale and Background to the Study**

The background to this study arose from observation made by the writer in the professional environment while involved in the process of value creation across a number of firms. This
work led the writer to consider the changing dynamic of innovation and the creation of business value. The literature review demonstrates that value creation was traditionally driven from and contained within the operational configuration of the firm. However, new forms of formal and informal partnerships appear to highlight a shift in the sources and processes motivating the creation of business value. These forms of formal and informal partnerships include but are not limited to (i) private-public partnerships, (ii) autonomous collectives like Wikipedia, (iii) open source software production, (iv) joint ventures, (v) creative commons, and (vi) outsourcing of creative activities like freelancer.com and so on. Merchant (2012) suggests that traditionally businesses directed their efforts at customers who were somewhat removed from the organisation by creating products they believed customers needed and then marketed to them.

S-D Logic has proposed that a focus on goods as a source of value is no longer relevant and that traditional thinking on value creation is now out of synchrony with concepts such as crowdsourcing, open innovation, co-creation and collaboration. Bradfield-Moody and Nogrady (2010, loc 932) claim that in a global economy facing resource constraints on several fronts “crowd-sourcing is a global response to a global talent war. With a dwindling supply of skilled workers, companies have to think outside the four walls of their buildings”. Lakhani (2013, p2) suggests that collaboration and “Crowdsourcing as a way to deal with innovation problems has existed in one form or another for centuries. Communities of innovators have helped kick-start entire industries, including aviation and personal computing”, Further to this, Rayport (2011, p1) states that “technology-based platforms explicitly designed for collaboration arose in the late 1980s with the concept of “groupware” or “collaborative work environments”. These made it possible for people to join forces even though they were working in different places and in different time zones”.

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Many young firms and many mid-size older firms often do not have the resources, skills or capabilities to completely manage the value creation process as a self-contained business function. Lee, Lim and Tan (1999) in their work examining strategic options for small and medium sized firms highlight that resource constraints are often the major obstacle faced by these firms as they look to grow. These firms engage in a range of partnering activities with complementary firms to develop new business value opportunities. Similarly, many larger firms that once managed these value creation processes internally to the firm, as an outcome of cost reduction, restructuring and technical complexity, have also pursued a range of outsourcing, acquisition and partnering processes to enable the continued development of new business value. According to Mandell (1999, p45) “network structures consists of public, private and not-for-profit organisations and/or individuals in an active organised collaboration to accomplish some agreed upon purpose or purposes” such as creating new business value.

The speed of technology advance and the changing nature of the customer relationship have meant that many of the traditional business value creation models like vertical integration, joint venturing and mergers and acquisition have become either too inflexible or too expensive to implement. These early models focused mostly on the governance of activity and the control and coordination of workgroups as a series of task based activities were undertaken. Todeva and Knoke (2005, p125) support this by arguing that the “governance referred to combinations of legal and social control mechanisms for coordinating and safeguarding alliance partners’ resource contributions, administrative responsibilities, and division of rewards from their joint activities”. Control of resources in this way is an expression of “corporate strategy that is heavily influenced by its roots in military strategy.” (Chan & Mauborgne, 2005). According to Cheverton (2010, p.7), this traditional approach led to a business culture that did “things ‘to’ our customers – through our products, our price
and our promotion while keeping customers firmly in their place”. These traditional controlling approaches to value creation have limited the ability of firms to engage with the more informed customer, who released by the power of the internet, can collect and gather information at minimal cost.

Business value creation has become reliant on a range of new collaborative models that are not only about the management and coordination of tasks, but which are also concerned with the creation and sharing of knowledge and active collaborative innovation. Kothandaraman and Wilson (2001, p380) suggest that businesses today have “moved deep into a cooperative paradigm that is based upon cooperative relationships between the buyer and seller. The focus has moved beyond individual firms to examining the value-creating network formed by the key firms in the value chain that delivers the value to the end consumer”. The advance of internet and social networking technologies and other collaboration environments has enabled a range of collaboration intensive business structures, thereby allowing firms and their collaboration partners to explore new ways of formalising and exploiting their relationships with customers.

A preliminary review of the relevant literature has highlighted a gap in the body of knowledge relating to the role and nature of collaborative relationships between customers, customer firms, supplier firms and other stakeholders in the process of value creation. Kothandaraman and Wilson (2001, p380) argue that “the drive to create value requires the assembling of core capabilities beyond the capabilities resident within the firm. Putting together a network of firms to build the set of capabilities necessary to build a market offering that delivers high value to the customer becomes a major strategic thrust of the firm.” The concept of Extra-Organisational Collaboration has been developed to explain this changing business value creation dynamic at the centre of many firms. This research project will seek to test the concept of Extra-Organisational Collaboration and provide a more
detailed explanation of how firms are managing business value creation as a function of Extra-Organisational Collaboration.

The research will draw on four key bodies of knowledge to assist with the formulation of a greater understanding of the role of extra-organisational collaboration in the creation of value. These bodies of knowledge include: (i) the concept of the firm; (ii) the concept of value creation; (iii) the concept of business collaboration; and (iv) the concept of co-creation.

The notion of Value Creation through a process of Extra-Organisational Collaboration suggests that firms operate with an extended social network of firms, customers and other stakeholders who all contribute to the creation of knowledge that is ultimately converted into a form of business value provided to consumers. These four main bodies of knowledge will assist with the understanding of how customer and supplier firms collaborate across the traditional boundaries of a firm to build business value. The concept of the firm, the concept of business value creation, the concept of business collaboration and the concept of co-creation are all important inputs into gaining a greater understanding of the phenomena of extra-organisational collaboration.
2.3 Parent Discipline: Theory of the Firm

In modern market-based economies, managing the process of value creation and the transaction of value is largely done within the framework of the firm. The following section will examine the firm and discuss how it has evolved over time to more efficiently manage the exchange of value and the associated process of creating value.

As one looks back, many of the historical periods are identifiable by the resident populations’ access to a resource, commodity or group of commodities, or indeed a source of tradable value. In 1836 Christian Jurgensen Thomsen (as cited in Heizer, 1962, p279) argued that human history could be defined “as evidenced in implements, into three chronologically successive ages: Stone, Bronze, and Iron”. Thomsen’s (1836 as cited in Heizer, 1962) Three-age theory represents an effort to formulate a chronology of man's past in terms of industrial stages. This classification “is characterized by Glyn Daniel as ‘only a plausible idea of the progress of human industrial development’” (Heizer, 1962 p279)

As humankind began to trade and utilise the value they created through this so-called industrial advancement, including enhancements in agriculture practice, construction and other key socio-economic activities, cultural groups emerged who built wealth based on the value extracted from the commodities or resources they controlled and their ability to trade that value with others. Roberts (1996, p10) asserts that the emergence of agriculture during the Bronze Age “released the brake on population growth which had held down hunter gatherer populations, (suggesting that the) storage of food, moreover, eased the way to specialisation of functions”. As the development and the search for new sources of commodity or resource based value evolved, so did the birth and the evolution of the firm as a significant economic entity.
2.3.1 The Role of the East India Companies

The East India Trading companies were examples of early organisations tasked with building wealth. Chaudhuri (1978, p6) proposes that “the organisation of Dutch and English trade to the East Indies at the beginning of the seventeenth century was far from being a chance, unplanned affair”. Within the structure of the East India Companies the “Directorate and their subcommittees provided entrepreneurial services in the sense that all decisions relating to the raising and management of trading capital, the determination of the volume of trade, and the introduction of new ideas on the running of the Company” (Chaudhuri, 1978 p.27).

Chaudhuri (1978, p.33) states that “the East India Company’s commercial organization and trading schedule can be viewed as a separate system in which certain factors, such as shipping, treasure, or supply of men, were inputs leading to a stream of outputs in the form of imported commodities”. These early firms evolved and became more complex. They altered their focus from commodities to the outcomes of industrial production and a progression of trade into products like silk.

2.3.2 The Evolution of the Firm during the Industrial Revolution

The industrial revolution removed specialisation from the influence of the guilds and craftsmen to large firms which drove significant productivity improvements across the process of production. As argued by Bradfield-Moody and Nogrady (2010, Location 88), the “waves of innovation that have shaped the world over the last 200 years... not only shaped the technology of each era, but also had a profound impact on the social structure and resource consumption”. The development of the relationship between specialisation and the advancement of wealth creation enabled the establishment of the earliest processes for creating economic value. Specialisation in technology played a major role in the evolution of the firm bringing together “a unique chronological process involving science, technology,
economics, entrepreneurship and management is the medium that translates scientific knowledge into the physical realities that are changing society” (Twiss 1986, p1). The good dominant logic that arose from the industrial revolution framed the purpose of the firm around the management of transaction costs and resulted in value creation conceptualisations centered on manufacturing, quality and the associated transactions (Lusch and Vargo, 2006).

Terry and Forde (1984, p.17) suggest that firms exist to transform resources into consumables that can be supplied into a relevant market. In their most basic form “the firm produces and sells one item only; hence all its costs and revenues are related to the production and sale of its sole good or service”. Slater (1997, p162) argued that “the theory of the firm has evolved through several explanations for the existence of firms, including the neoclassical theory of the firm, the behavioural theory of the firm, the transaction cost economics theory of the firm, resource based theory of the firm and finally a customer value based theory of the firm”. De Vogeleer and Lescop (2011, p3) suggest that the “Neoclassical theory treats the firm as a rational profit-maximizing producer that operates under assumption of perfect competition”.

This theory does not truly view the firm as an organization as is accepted today. It views the firm, in its simplest sense, as a producer of goods to maximize profit and that its decision frame will always be centered on the goal of profit maximizer. Accordingly, within the neoclassical view of economics “the firm exists to combine labour and capital to produce an end product” (Slater, 1997, p162). This view of the theory of the firm suggests that the creation of value through the development of products is the true purpose of the firm. The neoclassical notions of perfect and free access to information and the homogeneity of producers and consumers are inadequate in describing the role of technology, scale and managerial motivation in determining the performance of the firm in achieving its profit maximisation goal that are central to the theory.
Kantarelis (2010) argues that the Transactions Cost Theory of the Firm is centered on the problem or asymmetric information in transactions and comes into existence because it enables the firm to minimize the costs of inputs by extending operations up and down the supply chain to vertically integrate the components of value creation. The transactional cost theory of the firm identified this complexity of value creation as simply a matter of managing a series of transaction costs incurred in creating and selling value. Watkins (2009, p1) suggests that these transaction costs include “search and information costs, bargaining and decision costs and policing and enforcement costs.” Coase (1937) argued that firms exist to avoid market transaction costs, and enable the market to flourish. The notion of the firm according to Coase (1937, p393) “consists of a system of relationships which comes into existing when the direction of the resources requires and entrepreneur”. Clarke (1985) proposes that the decision whether to make or buy / use or sell will depend on the relative costs and subsequent profits available from the options for coordinating the alternative processes of value creation and are decisions best made by firms.

2.3.3 The Behavioural Theory of the Firm

The basic theoretical elements of the Transaction Cost theory fail to explain the impact independent managers have on the decision processes of the firm and its profit maximizing goals. Crossan (2005, p2) argues that “during the mid-20th century it became common-place in the modern world for companies to be owned by many individual (and institutional) shareholders. The Joint Stock Company was (and still is) the normal method for business ownership of large-scale firms. This type of ownership introduces a problem that is not relevant to owner-managed firms, namely separation of ownership from control or principals from agents. Under this type of business structure, the owners (shareholders) are not the decision makers. Instead, professional managers (agents) are employed to make business decisions on behalf of the shareholders, who as a collective body have the right to replace the
management but are not otherwise involved in the management of the firm”. The managerial theories of the firm that evolved to describe this changing dynamic are based around three extensions to the management theories espoused by Crossan: (i) the sales revenue maximization model, proposed by Baumol (1959); (ii) the managerial discretion model proposed by Williamson (1964); and the growth maximization model proposed by Marris (1964). Terry and Forde (1984, p248) suggest that recurring themes implicit in these models is “that the managers have discretion over the allocation of the firm’s resources because profits are not maximized.” Management discretion introduces inefficiencies to the processes of production because resources are not maximized to create profit as they are often diverted by other complexities of organizational control. Simon, (1959, p58) developed a model in which he proposed that firms consist of many decision makers, with a variety of different objectives, “these individuals within an organisation may be interested in profits, sales, market share, inventory and production”.

With distributed decision making and interest, organisations become involved in the resolution of conflicts, uncertainty avoidance, problematic search and organizational learning. These managerial models “offer some intuitive insight into how separation of ownership from control may affect the objectives of a firm” Crossan (2005, p4). They do not adequately allow observers to “predict reliably the ways in which firms react to changing economic circumstances” (Terry & Forde, 1984 p 255). The behavioural theory of the firm is useful for understanding the dynamics of how management influences decision making within a firm but does not provide insight into why firms perform the way they do.

The behavioural theory of the firm “attempts to compensate for this narrow view, and looks at what happens inside the firm, how the throughput takes place as economic activity, and how decisions are made regarding production, scheduling, and inventory” (Todeva, 2007, p1). Jensen and Meckling (1976, p311) argue that “viewing the firm as the nexus of a set of
contracting relationships among individuals also serves to make it clear that the personalisation of the firm implied by asking questions such as ‘what should be the objective function of the firm’, or ‘does the firm have a social responsibility’ is seriously misleading.”

The firm is a legal entity that enables business to be transacted on its own. It does not take on the characteristics of an individual. The Firm serves as a focus for a complex process in which the conflicting objectives of individuals are brought to bear on the operation of the firm. In this sense, the “behavior” of the firm is like the behavior of a market; i.e., the outcomes of an extensive array of individual motivations and decision making.

Cyert and March (1963) developed similar behaviour models that examined the interaction of individual managers within an organisation. An outcome of these models indicates firms likely to aim for a reasonable level of profits and seek to achieve other objectives in parallel.

As firms evolved the processes for creating value moved from being directly tied to the production and ownership of commodities to a joint creation of a range of products and services enabled through the motivation and specialisation of management and the exploitation of the commodities, skills or technologies.

2.3.4 Managing the Economic Value Chain in an increasingly Complex Environment.

The firm continues to be a central element in managing the activities of the economic value chain, however the environment in which these firms is becoming increasingly complex and older models of value creation need to be evolved. Technology and the management of information are playing an increasingly important role in enabling efficient means of production and value creation but has added a further complexity to the management and behaviour of a firm. Crainer and Dearlove (2001, p274) argue that the “importance of technology is self-evident. But it is surprising how few companies have managed to harness technology” or the benefits technology provides. As the technologies that characterise
enable the firm’s intellectual property become more accessible and able to address the complexity of modern firms, the products and services these firms provide are imbued by this complexity, understanding the behaviour of the firm on an operational dimension becomes more difficult. Increasingly the management of technology and knowledge have become a central element in the greater specialisation of firms and in the increasingly complex process of managing the economic value chain.

Dyer (1997, p535) proposes that the complexity of “the value chain in modern economies is characterised by inter-firm specialisation such that individual firms engage in a narrow range of activities that are embedded in a complex chain of input–output relations with other firms”. The discussion about value creation and the sources of value available to a firm can be derived from an examination of three sources of competitive advantage, (1) Resource Based, (2) Perceived Use, and (3) Exchange. Resource Base Value as defined by Bowman and Ambrosini (2000, p2) is the “heterogeneous resource endowments and these can be the source of advantage if competing firms are unable to imitate these resources”. An example of this would be a large mining company with access to the richest and highest yielding deposits of a mineral, assuming all else in terms access and extraction cost are equal then the mining company would have a resource based advantage. Another example of a resource-based example might be a Chinese electronics manufacturer, whose labour costs are significantly less than they are for competing Japanese or Korean firms. These firms would be deemed to have a resource based advantage.

Bowman and Ambrosini (2000) argue that the creation of value occurs when the resources available to the firm enable that firm to either better satisfy customer needs or enables it to satisfy the same need at a lower cost. The resource based view of value creation also supports the notion that “the value of the firm’s resources and capabilities is determined by the market context within which the firm is operating” (Barney, 2001, p645). This view of value creation
is deficient in explaining “the processes of transforming resources and capabilities into customer value” (Moller, 2006, p913). The value creation process in the resource centric view excludes the role of the consumer and their experience in determining the value of an offering.

In this limited review of the theory of the firm we can identify some significant trends emerging. “Firstly, there is widespread rejection of the neoclassical theory of the firm on the grounds that it is incomplete and based on flawed assumptions” and secondly is that these theories ignore “the increasing emphasis on managers as active decision makers working with imperfect information” (Slater 1997, p163). Drucker (1973) argues for a final claim against the relevance of these theories by developing an appreciation of the role of the market in influencing and driving the behaviour of the firm and the firm’s primary role and mission to satisfy the customer. Satisfying the customer requires the provision of a combination of goods and services that the customers value and are prepared to pay for. “The difference between value, that is, what customers are prepared to pay for a product or a service, and the cost of performing the activities involved in creating it, determines profits.” (Porter 1985, pXV). Likewise, the resource centered view ignores the important role that services play in the understanding of the value consumers are acquiring. The emergence of Service Dominant Logic suggested that a focus on the intangible, dynamic resources which combine the goods and service elements of new value are key factors at the heart of competitive advantage and performance (Madhavaram and Hunt, 2008). Gummesson (2014) suggests that under S-D logic the process of value creation requires firms to work within a broad network of interactive relationships between suppliers, customers and others to co-create value.

This section argued that a major role of a firm is to create value that can be exchanged for the benefit of both the supplier and the consumer and suggested that the process of value creation is critical to the development of sustainable competitive advantage of the firm. The section
also introduced the idea that service-dominant logic has broadened the complexity of creating value requiring new models and approaches to creating value foreign to the processes that were common in the goods-dominant logic that underpinned the early theories of the firm. Section 2.4 will explore the theory of business value creation and how this critical area of activity is a major contributor to the development of the model of Extra-Organisational Collaboration.

2.4 Parent Discipline: Business Value Creation

The value driven profit paradigm discussed by Porter defines a relationship between buyers and sellers within the chain of value creation which aims to maximize the distance between the cost of the product and the price consumers are prepared to pay for the benefits provided (Porter, 1985). Under the good dominant logic, that characterises Porter’s model, the purpose of the economic exchange between the firm and the customer was to make and distribute things to be sold. Forsstrom (2003, p2) argues that, under this approach to value creation, the firm is tasked with “buying as efficiently as possible. The relationship with the supplier is adversarial”. Adversarial models of value creation were relevant in the early industrial age where firms would undertake most if not all of the process relating to the process of value creation. Carlsson (1992) suggests that the forces driving disintegration of large businesses and a growth in small business were largely as a consequence of the changing nature of markets and the impact of technological innovation.

In recent decades, technology has enabled the creation of more complex products and services however the same levels of cross value chain specialisation have become less sustainable and firms have followed a path of disintegration and concentrated only on the core skills in which they hold a distinct advantage. Kothandaraman and Wilson (2001) claim that value creation in less integrated firms has led to firms combining their core capabilities
with the core capabilities of supplier firms into a series of “value-creating networks”. The S-D logic frame to value creation proposes that exchange between a firm and a customer is anchored in the service offering and that the goods involved in the economic transaction enable the application and delivery of resources (Vargo, Maglio and Akaka, 2008).

Value creation is a concept that gives meaning to the existence of the firm. The ability to create value that satisfies the needs or wants of a community that can be traded for currency or some other form of tender provides for the economic sustainability of the firm. According to Porter (1985) the core activities and functions of a firm where they had a form of advantage provide the firm with a basis for value creation and ultimately formed the basis of competitive advantage. As discussed previously Porter’s frame was driven largely from a transaction cost management philosophy across the supply chain and is heavily rooted in the goods dominant logic. However, one may argue that “value is created by organisational members (utilising the labour, capital and resources at their disposal) as opposed to value capture which is determined by the economic power relationship between the economic actors” (Bowman & Ambrosini, 2000, p 1.) in a value chain. Aarikka-Stenroos and Jaakkola (2012) argue that value creation occurs through an interaction between suppliers and customers and that customer perceived value of the offering is core to the firm’s competitive position.

Organisations create goods and services that stimulate emotions that consumers want or need in return for a positive return on their investment and Anderson, Kumar and Narus (2008) suggest that firms work through a process of conceptualising value – what resonates with customers, formulate value – analysing potential changes in the market offer, substantiate value propositions – demonstrate value to consumers, and tailor market offerings. Greater participation in the process of value creation and broader access to global markets has introduced a more informed consumer into the value creation process. Anderson (2006, p63)
suggests that the consequence of this greater engagement is “a shift from being passive consumers to active producers” or at least much more interested in the experience derived from the value being provided.

### 2.4.1 The Changing Nature of the Consumer

Izvercianua, Șerana and Braneaas (2014, p150) argue that, in a global economy experiencing complexity of change driven by economic upheaval and technological disruption, that “an organization faces a tough battle for survival because it cannot provide adaptation, improvement or innovation as fast as the market requires it solely based on its internal resources.” Against this backdrop, Izvercianua, Serana and Braneuas (2014, p150) suggest “that a collaboration between organizations and their stakeholders in order to develop systems, products or services, reinforcing the idea that consumer experience is central to enterprise value creation and innovation.”

This changing nature of the value based relationship between the customer and the supplier requires the supplier of value to continually seek to evolve to remain relevant to the customers “future changes in the structure and determinants of customer value” (Parasuraman, 2010 p 155). The study of the creation of value has attracted a significant amount of academic research and analysis. However, many of the organisational constructs used to create value, such as joint ventures, are now under significant pressure as consumers’ demand greater responsiveness and customisation.

Tapscott and Williams (2006) submit that we are entering an era where the changes in technology, demographic models, business constructs, the global economy and environment are driving a level of **people participation** never witnessed before. Tapscott and Williams (2006, p10) argue that “this new participation has reached a tipping point where new forms of mass collaboration are changing the how goods and services are invented, produced,
marketed, and distributed on a global scale.” A central premise driving the ability to build value within an environment of constant change is that organisations will need to adopt a more collaborative approach across a network of businesses in order to survive the rapidly shifting global economic environment. S-D logic is grounded in the idea that value creation is collaborative in nature where the supplier contributes with a value proposition that the customers activate by using or interacting with the value proposed (Aarikka-Stenroos and Jaaskkola, 2012). Bstieler and Hemmert (2010, p485) state that collaborative value creation is an activity that is now “increasingly staffed by individuals drawn from partnering firms and are expected to improve the projects chances of maximising the fit with customer requirements and to enhance mutual learning while reducing development time.” Gaining an understanding of how this process of Extra-Organisational Collaboration can be managed by firms to create business value is critical to the continued existence of the customer firm and supplier firms. Establishing a more detailed understanding of the process will enable firms to undertake repeatable value creation exercises and find efficiencies in their processes over time.

2.4.2 The Changing Nature of Value

The research problem examined within this literature review centres around the way in which organisations will work together in collaborative webs that include customers, customer firms and supplier organisations and any other stakeholders that contribute to build new sources of business value. According to Grulke and Silber (2002, p48), “Today competition is no longer between products, it’s between business models and you can’t get there through evolutionary change”. If, as suggested by Prahalad and Ramaswamy (2004, p6), consumers are seeking “to exercise their influence in every part of the business system. Armed with new tools and dissatisfied with available choices, consumers want to interact with firms and thereby co-create value”, finding a new model which enables businesses to
engage with consumers and other firms in the creation of business value is a challenge facing all business.

This alternative concept of customer-based value was supported by Bowman and Ambrosini (2000, p4) when they stated that “value is subjective, it is defined by customers, based on their perceptions of the usefulness of the product on offer. Total monetary value is the amount the customer is prepared to pay for the product.” This concept places much more importance on the role consumers pay in determining what is valuable and what they will be prepared to pay. Extending the consumers’ role in the creation of value further suggests that the value of a good or service is ultimately determined at the time of exchange. Exchange value is realized when “the product is sold. It is the amount paid by the buyer to the producer for the perceived use value” (Bowman & Ambrosini, 2000, p4). Walter, Ritter and Gemunden (2001, p366) support this view by claiming that “value can be regarded as a trade-off between benefits and sacrifices.” They further argue that value is a trade-off between many benefits and sacrifices gained through the development of customer relationships, the decision which opportunity to pursue is best made by the decision makers in the supplier firms (Walter et al, 2001).

The constant need to satisfy a consumer’s perception of value has resulted in an evolutionary force acting on the sources of business value, that were derived initially from the transport and supply of commodities and raw materials to a global market dominated by mass produced components such as silicon chips and other basic building blocks of more complex products. The second phase in this so-called evolution of value is the development of products. The manufacture and supply of products has evolved to such an extent that major corporations no longer consider it a strategic imperative to vertically integrate to manage all the processes of production and have outsourced many of these responsibilities to other organizations. This is occurring in an era of significant globalisation meaning that the
participating firms are often remote geographically from the consumer purchasing the product. As products, have increased in complexity the need to manage the service elements has evolved. Rawson, Duncan and Jones (2013, p2) suggest that “organizations able to skilfully manage the entire experience reap enormous rewards: enhanced customer satisfaction, reduced churn, increased revenue, and greater employee satisfaction. They also discover more-effective ways to collaborate across functions and levels, a process that delivers gains throughout the company”.

2.4.3 The Role of the Service Experience

The service phase of the evolution of value has become a major driver of products delivered in developed economies providing large levels of employment and generating significant levels of Gross Domestic Product. The advent of service dominant logic has moved the focus from goods to services and in the process redefined the idea of the value proposition to have a greater focus on the intangible elements of the offering and the allocation of skills, knowledge and experience. Service dominant logic has within its tenants of co-creation two separate ways of “conceptualising value: value-in-exchange and value-in-use” (Pinho, et al 2014, p 472). Customer Experience is critical to the success of a firm’s offerings and “is not limited to the customer’s interaction in the store alone. Rather it is impacted by a combination of experiences which evolve over time, including search, purchase, consumption, and after sales phases of the experience” (Verhof et al 2009, p37). Service creation a critical element of a firm’s competitive differentiator have now evolved and the management and delivery of services have been outsourced to specialty organisations that focus on the efficient and effective delivery of service. The creation of the “App Stores” of firms like Apple and Google demonstrate the way in which service value has been outsourced. In very competitive markets the sources of product and service value are quickly imitated by competitors “and profitable growth is a tremendous challenge many companies face” (Kim & Mauborgne,
The organisation with the existing customer relationship now sees the provision and maintenance of the "experience" as the key strategic weapon with which to combat competition. Building a process to create value innovation, which combines all the elements of product, service and experience to locate an area of the market and customer relationship into which the firm can offer” superior value from all the factors the industry competes on” (Kim & Mauborgne 1997, p4).

A concentration on delivering customer or market oriented value has altered the way in which the firm thinks about its management of the commodity, product and service components of the customer offer. Frow et al (2015, p 464) support the idea that value creation under a framework of S-D logic “involves the joint creation of value by the firm and its network of various entities (such as customers, suppliers and distributors)”. Day (2000, p24) argues that firms that were engaged with the customers can successfully introduce value to that market, and “the ability of a firm to create and maintain relationships with their most valuable customers is a durable basis for a competitive advantage”. The inability to efficiently operate across the whole value chain requires the firm to develop a collaborative approach to value delivery, significantly impacting the way in which value is created and the relationships that exist between firms. The development of a network of co-collaborators must consider “whether the effective cross-functional teamwork that is required for rapid response and innovation can be maintained when important expertise is outsourced” (Slater 1997, p165).

Ramaswamy and Gouillart (2010, p71) suggest that, for many firms, innovation is their greatest challenge and many are trying to improve their innovation efforts by “attempting to open up innovation by leveraging talent from outside the organisation”. This broadening of the scope of the process of innovation must include the role of the customer. While this section has examined the importance of creating business value, Section 2.5 introduces the role of the consumer in the collaborative value creation process.
2.5 Parent Discipline: Theory of Customer Co-creation

As the resources and organisational relationships central to the processes of value creation become more decentralized, the relationship between the firm and the customer is also changing. Seales (2000) argued that the “consumer economy” was a system where produces of values merely saw consumers as a method to turn their ideas into cash. However, with the advent of greater connectivity consumers are having a greater input into the value and associated experiences produced. Coates (2009) considered four main important issues. First, businesses today must continuously reinvent themselves to adapt to increasingly complex and dynamic markets. Secondly, standardization reduces the opportunities for companies to differentiate themselves from competitors. Thirdly, increasingly fragmented markets; and consumers have unprecedented access to information and networks. Finally, evolving technology has created improved production capabilities and innovation that enable and encourage greater degrees of customer participation and collaboration.

2.5.1 The Rise of the Prosumer

Kotler (1986, P510) references Alvin Toffler (1980), who in his book *The Third Wave*, argues that “consumers are a phenomenon of the Industrial Age. As society moves toward the Post-Industrial Age, so will the number of pure consumers decline. They will be replaced by ‘prosumers,’ people who produce many of their own goods and services”. Tapscott and Williams (2006, p125) have defined the term “prosumption” as a blurring of the gap between consumers and producers. This concept is not defining greater consumer centricity within organisations but suggesting that consumers are active participants in the process of creating value. This process of “building a ‘product’ that invites and enables customers to collaborate and add value” (Tapscott & Williams, 2006 p127) introduces significant opportunity for business to capture the value as it addresses the customer’s needs and wants. Ramaswamy
and Gouillart (2010) propose that consumers have a desire to be an active participant in the value creation process and that “the core principle underlying the transformation of enterprises toward co-creation is this: engaging people to create valuable experiences together while enhancing network economics.” (Ramaswamy and Gouillart 2010, p35). An example of the move to a co-creative process are the arrival of online travel services like Expedia and TripAdvisor, which allow consumers to interact with other consumers and design their travel and holiday experiences drawing on the broader network of service providers supporting the online service.

In discussing their original work Lusch and Vargo (2008) suggest that the initial work in service dominant logic was somewhat silent on the interaction between parties in a co-creation exercise and their associated networks. The central tenant of co-creation is that participants come together to co-create a value proposition. Mandell (1999) argues that a network structure must exist to enable different members to participate to accomplish some agree expression of value. Pinho et al (2014) argue that firms will form a “value network (a system of service systems)” which is a broad group of participants (including: companies, customers, suppliers, employees, shareholders and others) who contribute different elements into the creation of a value proposition. Frow et al (2015, p 470) identified nine core motives for forming a value network to undertake co-creation were: “(1) Access to resources; (2) Enhance the customer experience; (3) Create customer commitment; (4) Enable Self Service; (5) Create more competitive offerings; (6) Decrease cost; (7) Faster time to market; (8) Emergent strategy; and (9) Build brand awareness”. These reasons for forming co-creation exercises are not independent or exclusive of one another.
2.5.2 The Changing Nature of Value Creation

This changing model of value creation creates a significant challenge for both customer firms and supplier firms, because strategies do not evolve, develop in a vacuum or arise without significant input from key stakeholders like partners and consumers. They develop in a cooperative evolutionary manner as organisations interact with each other and their environment (Gray 2012). Customer and supplier businesses in a collaborative web working with an engaged consumer community require more robust business models and processes for dealing with the collaborative environment. In a direct reference to the good logic of the industrial era Tapscott & Williams (2006, p63) stress that “the old iron clad vessels of the industrial era will sink under the crashing waves, while firms that create highly nimble networked structures that connect to external ideas and energies will gain the buoyancy they require to survive”. As the author participated in value creation processes that were characterised by the collaborative nature of business networks and consumers the author could frame the business value creation model based on Extra-Organisational Collaboration.

The industrial enlightenment provided a strong base for advances in our capacity to generate and apply new knowledge; however, these advances pale in comparison to capabilities within reach today. Tapscott and Williams (2006, p125) argue that “plummeting computing and collaboration costs are widening the distribution of knowledge and power. At the same time, our ability to self-organize into large-scale networks is enhancing our ability to find, retrieve, sort, evaluate and filter the wealth of human knowledge and, of course, to continue to enlarge and improve”. Pintado (2010, p65) argues that “the proliferation of applications that promote connectivity, collaboration and interaction, coupled with the availability of easier-to-use and more mobile hardware devices, will make it increasingly more difficult for individuals to remain in the basic segment”. The shift from a traditional management style will be critical as Gray (2012) claims that the embedded hierarchical ways of organizing work from a goods
logic perspective means that most businesses are not designed to enable the level of agility, creativity, and connectivity that companies require to remain competitive. The business community has witnessed many periods of dramatic change that have given rise to new systems and methods of organizing work, often driven by disruptive technology or evolutions in the way a problem is solved. Cova (1996) argues that in this evolving environment firms need to include the consumer not as a target and its upstream suppliers as merely suppliers but all are partners and creators of the new experience value consumers are seeking.

Milne (2010, p2) suggest that “the upside is that several critical enabling tools are now evolving to enable us to address these issues in a global manner. The evolution of internet or the collaborative web is providing a platform for a global response to these issues. The collaborative tools now available are rapidly shrinking the world, allowing groups of interested parties to come together and create solutions and value”. Powell, White, Koput and Owen-Smith (2005, p4) state that “in a highly competitive world in which it is not easy to rest on past accomplishments, firms that do not expand or renew their networks lose their central positions” putting pressure on traditional brands to find new ways to extend their attractiveness to consumers. In The Long Tail Chris Anderson (2007), examines how the web has decimated the hit based economy, providing consumers with greater choice and accessibility to products. Anderson (2007, p40) also argues that the traditional economic models of the twentieth century are under significant pressure because “we’re increasingly forming our own tribes, groups bound together more by affinity and shared interests” impacting the strength of brands and the consumers’ reliance for the product vendor to be the expert on the product.

As the global economy evolves under the pressure of more active consumers and financial inflexibility, the need for large corporations to reinvigorate their approach to work and value creation will be critical if they are to maintain their central positions in the minds of
consumers and equity markets. The processes of active collaboration between supplier and
customer firms will become a critical strategy in maximizing the innovation and value
creation capacity of the firm. The mechanisms for successful co-creation are heavenly reliant
on the network of participants the firm can access. As Keast et al (2004) argue the
formulation of a network structure occurs when the participants in collaborative endeavor
agree to focus on a common mission or objective.

2.6 Parent Discipline: Theory of Business Collaboration

Rosen (2009, p9) suggested “the meaning of collaboration has evolved to reflect the
death of distance and the participation of once unlikely collaborators”. Business collaboration
has allowed firms from very distant parts of the globe to collaborate on the solution of
business problems or enabled organisations who were once competitors to interact to solve a
common challenge. Walter et al (2001, p365), suggest that “a growing number of researchers’
point to the importance of business relationships for Value Creation. Value creation is
regarded as the essential purpose for a customer firm and a supplier firm engaging in a
relationship.” The competitive and yet simultaneously cooperative nature markets mean that
the relationship between the customer firm and the supplier firm is constantly evolving.

Under the traditional models of the firm proposed by Clarke (1985, p175), three alternatives
for managing the value creation process can be considered “long-term contracts, short-term
contracts and vertical integration”. These models evolved overtime to include a range of
alliance based arrangements such as strategic alliances and joint ventures. Gulati (1998,
p.295) proposes that firms form strategic alliances via “voluntary arrangements between
firms involving exchange, sharing, or co-development of products, technologies, or services”
as an approach to managing the process of value creation. Vago and Lusch (2010, p176)
suggested that “a service ecosystem” is a coming together of a range of social and economic
actors “to (1) co-produce service offerings, (2) engage in mutual service provision, and (3) co-create value”. Cabiddu, Lui and Piccoli (2013) argue that value now emanates from the combination of robust collaborative relationships and the emergence of structures and incentives that stimulate firms to engage in sustained co-creation. These service ecosystems or collaborative networks come together to undertake solution development to enable a new value proposition to be delivered.

Boddy, Macbeth and Wagner (2000, p1004) highlighted the benefits of collaborative networks by suggesting “four motives for alliance formation: a need for specific capabilities; cost minimization; speed to market; and spreading financial risk”. This view is explored further by Gulati (1998, p301), especially when he states that “firms don’t form alliances as symbolic social affirmations of their social networks but, rather, base alliances on concrete strategic complementarities that they have to offer each other. It does suggest that the conditions of mutual economic advantage are necessary but not sufficient conditions for the formation of an alliance between two firms”. In their study of partnering, Boddy, Macbeth and Wagner (2000. p 1006) identified “partnering as an approach to inter-firm business relationships in which companies develop practices that encourage co-operative rather than adversarial behaviour”. The co-operative form of interaction discussed by Boddy, Macbeth and Wagner is a base level form of partnering that does not operate as extensively as full collaboration where value is shared more broadly.

2.6.1 Changing Nature or Business Collaboration

The central concept of business collaboration has been an evolving construct over the past two decades. During the 1990s the business collaboration model known as a joint venture was popular within the corporate sector. The joint venture model involved two or more firms with complementary skills, technologies or assets forming a jointly owned subsidiary entity
that would exploit the synergies made available through creation of the new firm. Gulati
(1998, p293) describes joint ventures or strategic alliances as “voluntary arrangements
between firms involving exchange, sharing, or co-development of products, technologies, or
services.” According to Todeva and Knoke (2005, p124), “several inter-organisational
formations emerge when organisations search for new efficiencies and competitive advantage
while avoiding both market uncertainty and hierarchical rigidities”. The operationalisation of
these new business forms often took an extended period to establish and the process of
negotiating ownership and participatory guidelines for the various partners was often very
legalistic. These forms of collaboration, also known as a network form of organisation, are a
very formal organisational construct often requiring the establishment of a legal construct,
governing structure and detailed solution development frameworks.

Gobillot (2009) stresses that success in business requires the firm to lock in access to
knowledge and expertise, the trade-off for firms has been buying expertise from outside or
maintaining the same expertise inside the business. Internalising a vast network of expertise
is expensive and inefficient. However, buying in the expertise leaves the firm at the mercy of
market forces of supply and demand. Podolny and Page (1998, p62) argue that “network
forms allow participating firms to learn new skills or acquire knowledge, gain legitimacy,
improve economic performance, and manage resource dependencies.” This form of
collaboration while somewhat popular has often been managed in a very structured and
bureaucratic manner. Batt and Purchase (2004, p170) suggest that “networks have both
economic and social dimensions for the optimal operation of the network”, thus implying that
the relationships within and between firms cannot be treated or managed only from a
legalistic or contractual viewpoint.

Partanen, Chetty and Rajala (2011, p1027) suggest that “To overcome their liability of
smallness, firms often complement their scarce resource base by engaging in different kinds
of networks and relationships. It is widely acknowledged that networks have major survival and performance implications for resource-poor firms”. Partanen, Chetty and Rajala (2011) support the notion that a network of relationships is formed between firms to access improved market information, access new markets, new technologies or processes or access the capabilities and resources of another firm via structures such as outsourcing. The network of relationships becomes a critical factor in the firm’s ability all the capabilities required to successfully create new value. In the work undertaken by Walter et al (2001), it was identified that collaborative relationships between customer firms and supplier firms can be characterised by a series of direct and indirect functions. According to Walter et al (2001, p367), the direct functions enable the firm to create value “without being dependent upon other connected relationships”. These direct relationships might be characterised by large customers purchasing a steady flow of product. These authors argue that indirect functions “capture connected effects” (Walter et al, 2001, p368) of the network of customer firms and supplier firms. The indirect relationships are important as they reflect the exchange occurring in another relationship within the collaborative network. The nature and use of direct and indirect functions will vary from relationship to relationship and depend on the nature of the relationship between the customer and the supplier firms. Keast et al (2004, p364) argue that collaborating firms in “network structures may require separate actions on the part of the members, but the participants are transformed into a new whole, taking on broad tasks that reach beyond the simultaneous actions of independently operating organisations”. Mandell (1999, p44) states that “network structures cannot be steered by traditional network methods, nor through contractual relationships. Instead new capacities are needed in the areas of managing conflict, power, influence and control, new modes of leadership and building trust”. Ylimaki and Vesalainen (2015, p939) suggest that “seamless collaboration and knowledge-based interaction between solution provider and customer is vital” The changing
dynamic of firms in a value creation process requires a transformation in the management and culture of firms who collaborate to co-create new business value.

As businesses, have vertically dis-integrated and become more specialised, the role of knowledge or access to a particular kind of expertise has become a significant reason for firms seeking to collaborate on the creation of new value propositions. Roussos and Fawcett (2000, p370) suggest that “several assumptions underlie the strategy of collaborative partnership: (a) the goal cannot be reached by any one individual or group working alone, (b) participants should include a diversity of individuals and groups who represent the concern and/or geographic area or population, and (c) shared interests make consensus among the prospective partners possible.” While the work of Roussos and Fawcett was drawn from community partnerships, the evolving nature of business networks is occurring with the intention of maximising knowledge obtained through network collaboration in opposition to the original reliance on internal capability of business units as the sources of knowledge and creativity (Batt & Purchase, 2004). Batt and Purchase (2004, p169) argue that “knowledge has been recognised as a strategic asset and a source of competitive advantage”. Within the construct of the business use of collaborative partnerships the firm with the end customer relationships brings significant knowledge and insight to the partnership. In comparison, the supplier firm tends to bring significant technical or process knowledge to the partnership. S-D logic suggests that all participants involved in the co-creation of a new value proposition are concerned with the effective integration of all resources, skills and knowledge, and consequently the need to interact becomes core to the success of the value creation.

2.6.2 S-D Logic and the Idea of Co-Creation

Successful co-creation under S-D logic therefore requires the participating firms to develop a network of effective collaborators. The decision to form a collaborative relationship is often
born out of an existing relationship that can be employed to create mutual benefit for the participants. Keast and Hampson (2007) identified that the process of building a relationship for collaboration was largely grounded on the trust and rapport of an existing personal relationship. Mandall and Keast (2008, p725) argue that an investment in time is necessary for members of the collaborative network to “building relations, trust, norms and commitment”. Firms that are successful at building these collaborative ventures are characterised by leaders or members who have a skill in building business networks and relationships.

The key factors that impact the speed in which a collaborative relationship is formed and the strength of the relationships include: (i) the level of trust and rapport between members of the collaborative network, (ii) shared values attitudes and perceptions about the value creation opportunity, (iii) the maturity of the power dynamics within the relationship, (iv) the ability to see the broader perspective of all the participants, and (v) strength of the shared goals that will legitimise the collaboration (Mandall and Keast, 2008). Payne, Storbacka and Frow (2008, p93) in developing an operational framework for co-creation make the claim that under S-D logic there are several contributing factors, including “the customer as a co-creator of value; marketing as a structurer of relationships, encounters and dialog; knowledge as the fundamental source of competitive advantage and the focus on operant resources as the key unit of exchange”. The performance of the firm with the strongest customer relationship and capable network of partners appears to be a critical factor in determining the long-term existence of the relationship between the customer firm and the supplier firm. In the past many specialist manufacturing companies, have made significant strategic and investment decisions based on the potential of the customer firm to deliver long term income streams, for example Alcan Aluminum and Coca Cola Bottlers co-locating production facilities in Richlands, Queensland. Hansen (2009) suggests that value creation opportunities can be
found in a collaboration matrix that identifies the relationship between two or more firms from the perspectives of the customer and specialization. Hansen (2009, p38) argues that when leaders use an approach where they examine the intersections of businesses based on (i) the holder of customer relations; and (ii) the provider of competencies and services, they “engage in a disciplined and fine-grained evaluation of where the upside really exists.”

According to Gulati (1998, p295), “economic action-like any other form of social action-does not take place in a barren social context but, rather, is embedded in social networks of relationships.” Social networks provide the basis for firms with access to the necessary skills, capabilities and knowledge to facilitate the creation of value in the complex business environments. This is especially relevant when consumers appear to have a much greater input into the value creation processes of firms and where very few firms have the capacity to go it alone when servicing customers. The importance and relative strength of the relationship between customer and supplier firms are a critical element in the formulation of a collaborative value creation process. The extent of a firm or the principal members of the firm’s social network can “enable the creation of new alliances by three distinct means: access, timing, and referrals” (Gulati 1998, p298). Pintado (2009, p137) suggests that the process of building business networks is linking “individuals and groups for the common purpose of conducting business”. Merchant (2012, p34), proposes that “once profits came from vertical integration in the industrial era; power in the social era can come from connections, communities and unlocking the creativity of different parts of the organisation” or supply chain.

The availability of tools and the ability of an organisation to execute on collaborative action have in the past, been somewhat limited. However, as the world has become more connected and geographically less remote and access to information becomes more universally available, the opportunities for firms to engage in cross business collaboration are becoming
somewhat easier. The changing nature of the business community is enabling social networks that can be defined as “a set of nodes (e.g., persons, organisations) linked by a set of social relationships (e.g., friendship, transfer of funds, overlapping membership) of a specified type” (Laumann, Galaskiewicz, and Marsden, 1978, p458). The more active the members of the social network the more viable and powerful the network becomes in the process of creating value. Cantu et al (2015, p 958) suggest that much “innovation is generated by the interconnected relationships between actors that belong to different network positions and are characterised by different resources and by the coverage of the innovation goals”. A study of biotechnology startups in 1994 found that the number of collaborative relationships formed by a firm had a positive relationship to a firm’s innovative output. (Ahuja, 2000)

2.6.3 Building Collaboration Ecosystem a Core Enterprise Strategy

Whereas networking was once the domain of business clubs and organisations to identify a competitive advantage, today networking is facilitated by the increasing use of various forms of social media to establish collaborative advantage. The web has become a driving force for social interaction and collaboration, both of a formal and informal nature. In fact, large numbers of individuals spend extensive time collaborating and sharing information, data, experience and knowledge in online environments. While many of these early experiences, some more successful than others, have been more about obtaining personal benefit and gratification, the same conceptual opportunities are also available to businesses in the broader economy. Tapscott and Williams (2008) suggest that the capacity to collaborate will extend our ability to create way beyond anything experienced during the era of industrialisation. The connectedness of businesses and consumers in the “social era will reward those organisations that realize they do not create value alone. If the industrial era was about building things, the social era is about connecting things, people and ideas” (Merchant 2012, p5). In recent times, the arrival of online collaborative businesses like AirBNB or UBER have bought together
many business participants extending the reach and value available to each individual participant.

Building business networks is a necessary part of establishing disciplined collaboration. Networks allow businesses to expose themselves to a broader spectrum of value creation activities. As the firm size grows it is important for managers to pay attention to both the internal and external networks. Hansen (2009, p127) suggests that the size of the business network is not the most important consideration, but “the diversity of connections”. The broader the types of people, skills, expertise and viewpoints the greater the opportunities to trigger and initiate value creation exercises. Ramaswamy and Gouillart (2010) suggest that building social ecosystems by engaging with a range of stakeholders enables co-creation to become an efficient and sustainable process for building growth opportunities. They further argue that building the ecosystem must go beyond the enterprise centric view. Firms must continually look to build a collaborative infrastructure which includes technology platforms and a network of contributors including customers.

2.6.4 The Customer as Part of the Collaborative Network

The social era is connecting consumers and providing them with the insight and tools to make the leap to becoming fully fledged prosumers, and causing a break with the traditional view of the market implied that firms acted autonomously designing products and services with little engagement with the consumers. In the past, firms attempted to box up customers into segments and markets and treat them as a homogenous bunch based on high level demographic and psychographic factors. The fact that “customers are connecting, forming networked communities that allow them to rapidly share information and self-organise into powerful interest groups” (Gray 2012, Location 331) significantly challenges the status quo view of marketing and product development. Mathwick, Malhotra and Rigdon (2001, p41)
suggest that consumer collaboration comes in the form of “cognitive, behavioural or financial investment on the part of the consumer” According to Prahalad and Ramaswamy (2004, p6), consumers are seeking “to exercise their influence in every part of the business system. Armed with new tools and dissatisfied with available choices, consumers want to interact with firms and thereby co-create value”. The S-D logic idea that the customer is a central participant in the service experience makes their involvement a critical factor for successful co-creation.

S-D logic has provided strategic leaders with a range of co-creation opportunities, the challenge for these leaders is to align these choices with their strategic priorities (DeFillippi and Roser, 2014). DeFillippi and Roser, (2014, p35) claim that those involved with collaborative co-creation “need to create adaptive, yet replicable business process given that relationships take on a different character and have different managerial implications when engaging crowds, organisational members and strategic partners”. One of the identified shortcomings of S-D logic is the lack of prescriptive how to manage co-creation processes. Section 2.7 will introduce the model of Extra Organisational Collaboration as a way of managing the co-creation activities of firms.

2.7 Basis of a Theoretical Model

The authors experience building new value in an era of decentralised and collaborative decision making in a partnership with customers, customer firms and supplier firms led to the formation of the Extra-Organisational Collaboration model for creating new business value. This model provides additional support to S-D logic by providing a descriptive framework for collaborating actors to co-create new value. Extra-Organisational Collaboration involves several firms and customers collaborating to create new business value to address an identified opportunity or deficiency that results in the creation of new value that delivers a
positive outcome for all the participants in the creation process. Building on the co-creation approaches discussed under S-D logic, the process of creating value under this model assumes that no one firm has the capability or resources to efficiently or effectively create the value on their own. The model also assumes that at least one firm has an economic relationship with the customers who will seek to benefit from the value being created and that all participants in the collaboration are doing so from a win-win objective. Ramaswamy and Gouillart (2010, p34) noted that “Ultimately becoming a co-creative enterprise is not just about ‘thinking outside the box’. The transformation results in a ‘win more-win more’ approach to doing business that benefits the enterprise’s employees, customers, suppliers, partners, investors, and all other stakeholders.

Rosen (2009, p10) argues that “taking the time to agree to the goals at the beginning of the collaborative project pays off exponentially by providing the impetus for shared creation.” And Todeva and Knoke (2005, p128) argue that “the level of cooperation between businesses seems much less influenced by internalised costs and benefits than by: the history of the partnering firms’ relationships; the current market positions of each firm; their joint resource capabilities and informal asymmetries relative to firms engaging in arm’s length transactions”. The decision to align and to collaborate is based on the underlying strategic intent to create new business value that can be monetised with customers, which is fundamentally a statement of “strategic intent, which aims at improving the future circumstances for each individual firm and their partnerships as a whole” (Todeva & Knoke, 2005, p129). The value of this form of extra-organisational collaboration in creating new sources of value across multiple participating firms makes a better understanding of the dynamics that underpin the process of extra-organisational collaboration more important.
2.7.1 The Model of Extra Organisational Collaboration

As demonstrated in the following Figure 2.3 the concept of Extra-Organisational Collaboration involves three role entities. However, participants may play more than one role in the establishment of the collaborative network. The three roles in the model are defined as the Customer Facing Firm, the Supplier Firm and the Collaboration Co-ordinator. Customers also play a role in the co-creation activities of the Extra-organisational collaboration but are not seen as providing a central role in establishing or sustain the co-creation endeavours. The relationship with the customer and their engagement in the value creation process also plays a significant role in determining the success of the collaborative endeavour. Payne, Storbacka and Frow (2008) suggest that there is benefit for the collaborating firms if the customer is involved in every stage of the co-creation of a new value proposition.
The model of Extra-Organisational Collaboration has four key actors or participants: the supplier firm, the customer firm, the customer and the collaboration coordinator. Firms which operate on a business to business basic would tend to be framed as supplier firms. These firms are focused on providing goods and services to other firms to enable them to deliver their own products and services. Customer firms are those firms which have a largely business to consumer orientation, in that they provide products and services to the end consumer of those products or services. The collaboration coordinator is member of one of the participating firms and provides the coordination and engagement of the collaborating firms. Customers play an important part in the model as they provide a purpose for the creation of new value, underscoring the economic basis for the value creation activities. Cass and Ngo (2012) argue that firms need to be more than simply market oriented, they must also build relationships with other firms and collaborate with them to create value. According to Cass and Ngo (2012, p132) a “B2B firms’ market orientation acts as a key market sensing capability, and their marketing and product innovation capabilities act as key market-relating mechanisms providing the basis for superior value creation”. In essence the ability of the customer firm to bring knowledge and insight from their customer relationships adds significant value to the supplier firm and their collaborative endeavours. The various parties in the model bring skills, capabilities, knowledge and resources to the value creation process that complement existing capability or enable new value to be created.

The participation of the customer facing firm is central to the collaborative network and the collaborative process. The customer facing firm gathers customer insight from their relationship with the customer and provides a framework through which the value creation can be monetised and allows for a faster dispersion of the value through the customer and market. Hansen (2009, p30) suggests that collaboration has a “significant impact on financial
returns through three mechanisms: increased sales, cost savings and improved asset efficiency.”

The role of the supplier firm/s is to provide “the specialist competencies and services” (Hansen 2009, p37) that the customer firm does not possess or have the available capital and resources to create or acquire. Working off the previously discussed assumption that business success is based on an accumulation of knowledge to control transaction costs, it is easy to understand why businesses became a congregation of capabilities and expertise. However, the advent of readily accessible technology, greater business complexity and a greater understanding that the value of the service relationship managed with customers has led to break down of the vertically integrated corporations. With technology providing access to information and a lowering the barriers to enter a new market and the use of outsourced business partners to manage non-business critical activities. This changing dynamic has changed the strategic focus of firms and how they pursue transaction cost reductions and “are helping us rethink our business models on a broader scale than ever before, helping us to focus on our core value proposition, while making everything else cost-efficient” (Gobillot, 2009, Location 576). According to Payne, Storbacka and Frow (2008, p86) “S-D logic suggests relevant meanings are created by the experiences a customer has over time” evolving value creation from designing great products to the creation of an entire service ecosystem that delivers repeatable relationship experiences. Forsstrom (2003, p3) suggests that “the parties in a business relation are engaged in mutual value creation”.

Accessing specialist capability from co-collaborators allows the customer firm to dedicate its scarce resources on managing the relationship, the experience and extracting insight from the customer. Merchant (2012) argues that working in this way allows the customer firm to evolve its strategy and customer offer without inheriting major costs from a rigid all-encompassing business model. In this mode, the customer firm does not have to make big
commitments or investments building internal capacity. This capability lies with a range of supplier firms who can be assembled in a fluid process of creating value as customer needs evolve. This supports the idea that “doing work no longer requires a badge and a title within a centralised organisation. Anyone with preapproved or vetting criteria – will create and contribute” (Merchant, 2012 p6). Leaders in this environment must move away from their trust in the traditions of hierarchy, status and structure to instead focus on “simplicity, narratives, tasks and love, leaders can help the community to release its value” (Gobillot 2011, Location 1577) therefore releasing the creative energy of the firm. The challenge for leaders operating firms in this environment is to establish processes whereby business sustainability can be developed. Through the development of a process of Extra-Organisational Collaboration, business leaders can establish process and routines that support creativity and allow continual innovation of the customer offer.

2.7.2 The Key Role of Collaboration Coordinator

As the Figure 2.3 above shows, collaboration and competition are not necessarily exclusive. In fact, Rosen (2009, p210) argues that “healthy businesses need to compete in the marketplace, but that a myopic focus on destroying competitors leads to unhealthy business habits that ultimately compromise business profits”. Collaborating with a firm that is also competing for value from the same customers can save the customer firm the cost and time required to recreate technology capability, often which is subject to a range of intellectual property protections that add to the cost of re-creation. Being able to work together with a competitor to deliver new value to the customers of the customer firm “is primarily about people, about trust, and a willingness to share information and work in a coordinated manner to achieve a common goal” (Coleman & Levine, 2008, p25). Central to the success of any collaborative effort is keeping the participants in the loop. For this reason, the role of collaboration coordinator becomes a central success criterion for Extra-Organisational
Collaboration. The collaboration coordinator provides a focal point for communications, for tracking progress and continually validating the progress of the value creation endeavour against the original intent.

The distributed nature of collaborative exercise across organisations with independent and often competing objectives, multiple organisation cultures and business priorities requires significant effort to bring about a successful value creation exercise. Keast et al (2004) suggest that there are three characteristics of network structures that need to be the focus collaborating firms (i) they all subscribe to a common objective, (ii) the participants are interdependent and must see themselves as part of a broader endeavour, and (iii) each collaborative arrangement will be unique. Coleman and Levine (2008, p25) observe that today’s collaborative environment has moved beyond the boundaries of a single organisation and “often means working with people inside and outside the organisation (in your value network) who have a wider spectrum of roles and relationships in this ecosystem”. Rosen (2009, p201) argues that an “idea can be enhanced and improved by a lot of minds thinking about it”.

In his research examining collaboration in the non-profit sector, Isbell (2012) identifies boundary spanners as individuals who act as communication facilitators or sometimes in a more proactive role as exchange agents between the collaborating parties. These boundary spanners take on a role to either formally or informally provide a bond between the collaboration participants. Kousgaard, Joenson and Thorsen (2015, p1) suggested that with the more formal role of the boundary spanner their challenges “could be divided into three categories: 1) Defining and negotiating the new role; 2) Representing and mobilizing colleagues; 3) Navigating in an unfamiliar organizational context”. Whilst these challenges are similar for the collaboration coordinator, a greater focus on delivering a commercial outcome requires a more formal agreement of the role to be established between the
collaborating parties. This need for formalisation of the collaboration coordinator role is supported by Williams (2012) who argues that the boundary spanner encounter divided loyalties bought on by the potentially diverging perspectives and interests of the participating organizations and the individuals involved as boundary spanners mainly are primarily accountable to the organization which employs them. A critical success factor for Extra-Organisational Collaboration will be formalising the action oriented, task management accountability that the collaboration coordinator. The formalisation of the role of the Collaboration Coordinator provides agreement that this role will be responsible for managing the central coordinating activities during the process of creating value.

The coordinator role is all about maintaining trust and commitment between the participating organisations and delivering outcomes based on a shared timeline, mission and view of the final value. “The secret of value creation is building a better and better fit between relationships and knowledge” according to Normann and Ramirez (1993, p77) and defines the central role of the collaboration coordinator. The collaboration coordinator actively manages the process of collaboration by clearly defining the broader outcome of the value creation process, actively engages others in the process of collaboration and holds themselves and others involved in the collaboration accountable for the outcomes (Hansen 2009). During the process of collaboration, the leader’s time is best engaged maintaining the narrative, keeping the participants focused on the tasks involved in delivering the narrative and finding opportunities for the participants to reinforce their self-image and commitment to the creative process (Gobillot 2011). Developing the narrative is a significant role of the leader as the narrative describes the key vision and end state that the collaborative process is intended to deliver. In effect the narrative describes the end state value that will be created.
2.7.3 The Process of Extra-Organisational Collaboration

The process of Extra-Organisational Collaboration is initiated by members of the collaborative network becoming aware of an opportunity or a deficiency in the delivery of customer value that can be exploited by working together to deliver an improved value outcome and progresses through a process, that when successful, enables the participating collaborators to deliver new value and build confidence in the process of further collaboration. Figure 2.4 below introduces the seven phases of an Extra-Organisational Collaboration commencing with the awareness phase, followed by motivation, enlistment, mediation and synchronisation, sharing, defining and creating and finally reflection.

![Figure 2.4 The process of Extra-Organisational Collaboration developed by the Author](image)

The **awareness** phase requires at least one of the collaborating parties to become aware of an opportunity to create new value for an end consumer. Anderson, Kumar and Narus (2008, p22) define the activity of awareness as a process of formulating value which begins by “analysing what potential changes in the market offering customers would value vis-à-vis the next best alternative”. Gulati (1998, p305) introduces “the idea that each partner’s
comprehension of an alliance’s payoffs is crucial for understanding the incentives to cooperate and for understanding the possible ways each can unilaterally influence the outcome."

The opportunity once identified requires a champion who will begin communicating this opportunity for value creation to potential collaboration partners. The idea champion must access their network of business and personal relationships to determine the members of the co-creation network or “breeding environment that represents an association or pool of organisations and their related supporting institutions committed to collaborate” (Ollus 2007, p2).

The next phase in the process is motivating other potential partners in the network to consider the opportunity. Batt and Purchase (2004, p170) argue that “collaboration involves both aligning the economic goals and aims of the network and the development of social dimensions – in particular mutual trust and commitment.” This phase in the extra-organisational collaboration is referred to the motivational phase, a process whereby the partners in the relationship will develop confidence that the value opportunity has economic merit and that the partner/s “will perform actions that will result in positive outcomes for the firm” (Batt & Purchase, 2004 p170). The economic viability of the value opportunity or deficiency provides significant motivation for a firm to seek partners to create a solution to extract value from the opportunity or deficiency.

Roberts (2006) argues that trust is the other core ingredient to motivating a network. An expression of trust by a participating collaborator describes the beliefs the participants have that the others in the network will behave in a manner that benefits the participants of the collaboration. This expression of trust also shows that the participants share a high degree of common understanding and shared context on the value of the outcome. The net value of the
collaboration will be determined by the participants by identifying the collaboration premium (Hansen, 2009). The collaboration premium is calculated by extracting from the return on the project any opportunity costs and any collaboration costs. These costs will not only be concerned with the direct financial costs of the project, but also the associated costs of loss of trust or loss of community position by being associated with a failed collaborative exercise. Developing a shared motivation for the value creation opportunity then allows the initiating party to enlist other firms and professionals to engage in the delivery of the new value.

The process of collaboration member enlistment requires that the party identifying the opportunity to create value realises that they are incapable of technically, operationally or economically delivering the solution to extract value on their own and seek to enlist partners in the delivery of the value. Cantu et al (201, p959) discuss that with the “shift from outsourced innovation to co-managed innovation, firms need to select and involve both vertical suppliers and customers”. During the enlistment phase firms, will need time to adapt the new way of working. Mandell and Keast (2008) suggest that for firms to achieve this shift in orientation, they will need to “challenge their perceptions, attitudes, values and norms and that participants will need time to decide as to how far they are willing to go in changing the status quo”. In their September 2009 report the National Endowment for Science, Technology and the Arts (NESTA) argued that a project that successfully employs a co-creation approach has the potential to help any idea generation and innovation approach become more relevant and powerful to all participants by engaging and drawing upon a diversity of perspectives. Keast et al (2004, p388) argues that a strong motivation phase will result in members of the collaboration team “seeing themselves as one small piece of a large whole”. The NESTA report argues that the process of enlistment is fundamentally “about collaboratively creating as an interdisciplinary group. As a whole, collaborators form an agile and adaptable team representing a variety of skills and abilities” (2009, p10).
Enlistment of the parties into the extra-organisational collaborative endeavour initiates a process of mediation and synchronisation to determine a response to three challenges facing extra-organisational collaboration:

- establishing a framework for the sharing of value created;
- ensuring the protection of intellectual property; and
- managing conflict and disputes.

Todeva and Knoke (2005, p125) refer to this process of establishing governance over their extra-organisational relationship where “governance refers to combinations of legal and social control mechanisms for coordinating and safeguarding the alliance partners’ resource contributions, administrative responsibilities and division of rewards from their joint activities.” The establishment of a frame of reference for value sharing requires all the members of the collaborative activity to negotiate to establish the method whereby the value created will be shared among the participating members.

While the members of the collaboration may recognise the total value available from the proposed value creation process, one of the key success factors in establishing the coalition of willing participants is that all parties need to be aware of the benefits being sought from each of the collaboration participants and be prepared to work towards a win-win outcome.

According Tamm and Luyet (2004), all members of the extra-organisational collaboration must be tenacious in ensuring that they receive their interest from the value creation process, but that each participant needs to be flexible in how that interest is extracted from the value created. Gulati (1998, p 305) suggests that “each partner’s comprehension of an alliance’s pay-off is crucial to understanding the incentives to cooperate”. Dyer and Singh (1998) argue that the ability of the collaborating partners to evaluate the value of each partner’s contribution is a function of the level of access that each firm has to information about each
of the participating partners. They also argue that “the ability of collaborative partners to realise the benefits… is conditional on compatible decision processes, information and controls systems, and culture” (Dyer & Singh 1998, p. 668). Payne, Storbacka and Frow (2008, p93) highlight the need for those involved in the co-creation of value need to manage the extended enterprise “by managing across and within the customer and supplier value creation processes”.

With the parties contributing a range of intellectual property, such as brand, technology or process commercial secrets or patents, know-how, skills and customer insight, to the collaborative exercise, methods for protecting these contributions need to be addressed in the formation of the collaborative partnership. Hurmelinna-Laukkanen and Ritala (2010, p12) state that protection “is partly a question of the effectiveness and effects of protection and partly a question of the interplay between innovation and complementary assets”. They argue further that “maximising protection rarely leads to the most favourable outcomes and using it to enhance the value of an innovation is what really matters” (Hurmelinna-Laukkanen & Ritala,2010, p. 12). Overly legalistic governance and protection of intellectual assets will most likely slow the pace of value creation, create the basis for unnecessary conflict and dispute and project an image of a participant being an unattractive partner. Norman and Ramirez (1993, p69) claim that “if the key to creating value is to co-produce offerings that mobilise customers, then the only true source of competitive advantage is the ability to conceive the entire value creating system and make it work”. In their study of service innovation, Hurmelinna-Laukkanen and Ritala (2010, p18) found that “human resource management, lead time and contracts as protection mechanisms” have the most effect in affording the collaborative partners’ protection. These three elements protect against the risks embedded in a highly mobile skilled workforce, and the lost opportunity to capitalise on the innovation and finally the contract enshrines the rights of each participating party. The
establishment of the contract also enables the governance structure of the extra-organisational collaboration to be documented.

The concept of governance and the framing of compatible decision processes suggested by Dyer and Singh (1998) complement the idea that the collaborative partnership needs to build a common agreed approach to managing conflict and dispute. Coleman and Levine (2008) identify three sources of conflicts: relationship conflicts; process conflicts; and task or cognitive conflicts. Much of this conflict occurs because without a predefined governance framework “when two firms simply attempt to work together based on a formal agreement, the clean authority lines of corporation hierarchy typically are supplanted with disorderly parallel command and report systems” (Todeva and Knoke, 2005, p134). Tamm and Luyet (2004, p16) argue that conflict is a likely part of most collaborative exercises and having a pre-formed approach for managing the conflict so that “when conflict arises, the parties, seek to understand and to grow, for they desire mutual gains rather than victory”. Rosen (2007) suggests that effectively governing the collaborative process requires the participating organisations to link their practices, approaches and principles to processes. This links the organisation from the grass roots level through to senior managers and engages the organisation in regular forms of information sharing and open communications removing risks of misunderstanding and a lack of decision transparency. Roussos and Fawcett (2000, p 392) argue that “the core membership of the partnership should develop a widespread leadership, engaging a broad group of members” and that the collaborative partnership should “systematically document its progress” as “ongoing documentation, feedback and critical reflection should be used to assess progress, celebrate success and redirect efforts”. Todeva and Knoke (2005, p134) claim that the key to successful implementation of an extra-organisational collaboration is to “develop a practical governance structure with sufficient power and control; and learn how to cooperate for mutual benefit”. The Mediation and
Synchronisation stage of the extra-organisational collaborative cycle must ensure the treatment of value sharing; intellectual property ownership and process governance is clearly defined if a successful outcome is to be achieved.

Once the appropriate governance framework has been established through the Mediation and Synchronisation the collaboration leader needs to initiate a Sharing activity that becomes the formal start of Extra-organisational value creation process. Ramaswamy and Gouillart (2010, p5) found that collaboration participants must come together to engage in dialogue as “most business problems are complex and their solutions are not obvious. To address them, people with a wide range of perspectives often need to come together to hear and see the issues firsthand and work on resolution”. The intent of the sharing exercise is to allow the participants involved to “imagine new, positive experiences for themselves and develop interactions that did not exist before” (Ramaswamy & Gouillart 2010, p6). Sharing is an important factor as it allows all the participants in the creation process to create a shared view of the opportunity and define a vision of the end state and map out a process to reach that outcome. Coleman and Levine (2008, p179) argue that “people who are working together often waste resources because they do not have a clearly articulated vision of where they are going and how they will get there.” Drucker (2006, p7) argues that “because innovation is conceptual and perceptual, would be innovators must also go and look, ask and listen…. They work out analytically what an innovation has to be to satisfy an opportunity”. Bringing together the collective capacity of the participating collaborators to analyse and contemplate the opportunity adds another “dimension by focussing on using insight to inspire new business thinking and ideas rather than just validate that which exists” (NESTA 2009, p16). Grulke and Silber (2002, p279) draw attention to the need to focus on the solution by claiming that “detail is important in both the understand and design phase.” They further argue that the early coming together to frame the value creation opportunity “does more to
define the gap between our future reality and the current reality of our past. It shows us how we bridged the gap. It helps us identify the imperative strategic actions” (Grulke and Silber, 2002 p283).

The value creation exercise with a well-articulated outcome progresses through a process of Defining and Creating. Participants collaborate to build the value opportunity by agreeing the detail of what will be developed and committing resources, capital, intellectual capacity and access to the customer to create value that addresses the opportunity or deficiency originally defined. NESTA (2009, p10) suggests that the process of “empathic collaboration” is founded on a principle of the collaborators coming together in a structured process to maximise productive creative output. They further argue that “co-creation isn’t about happy-clapper brainstorm and blank sheets of paper; it’s about well-channelled creative energy and structured tasks that meet a business challenge in a smart and structured way” (NESTA 2009, p12). Coleman and Levine (2008, p207) propose that taking “the time at the outset to express where you are headed, the route you will travel and who will do what to get you to the destination, everyone would know how their needs are taken care of.”

The Define actions within this process must reference the vision or outcome framed in the Awareness and Sharing phases of the extra-organisational collaborative endeavour. Crainer and Dearlove (2001) suggest that a constant framing of the value proposition during the definitional phase must centre on the following criteria: (i) the market/customer need must be clearly identified and remain a central focus; (ii) a clearly articulated collaboration outcome: (iii) the project must represent the best approach to deliver customer value; and (iv) must deliver a clear competitive advantage for all the participants. Adler, Heckscher and Prusakin (2011) in their study on building a collaborative enterprise identify a key principle of success in collaborative endeavours as “an ethic of contribution”. This concept suggests that participating in a collaborative endeavour means “going beyond one’s formal responsibilities
to solve broader problems, not just applying greater effort” (Adler, Heckscher and Prusakin, 2011, p98). Aarikka-Stenroos and Jaakkola (2012) propose that the suppliers amplify the process of value creation by contributing their specialist knowledge, experience and objectivity, and when parties fail to contribute their elements of the define and create activities the value extracted is sub-optimal. Collaborative relationships will become more entrenched and valuable as “organisational actions grow more integrated and mutually controlled through intertwined operational, strategic and social mechanisms” (Todeva & Knoke, 2005, p135). Drucker (2002, p8) argues that, during the Define and Create phase of the value creation process “as in any other endeavour, there is talent, there is ingenuity, and there is knowledge. But when all is said and done, what innovation requires is hard, focused, purposeful work”.

The success of an Extra-Organisational Collaboration will be measured by the participants based on the value each may extract from the collaborative endeavour and by the adoption of the new value by the customers targeted. During the Reflection stage of the process, the participants reflect on the success of the value creation exercise and their own ability to extract the benefit originally sourced and examines opportunities. Measuring and reporting the adoption of any value creation process is a standard practice in most firms. The assessment of success will be measured qualitatively and quantitatively against the perceived benefits that the participants used to justify their original motive for joining the collaborative endeavour. Gulati (1998, p 310) suggests that “close vertical ties that are characterised by rich information exchange and long–term commitments can lead to greater cooperation and joint activities” between the collaborative partners. Extra-organisational collaboration as a value creation process delivers benefits to the participants in two forms, direct value and indirect value.
Walter, Ritter and Gemunden (2001) suggest that the ability to sell more, increase profit or cash flow and protect customers from a dynamic marketplace can be characterised as the direct benefits of collaboration. They suggest increases in technical know-how, access to new markets, the ability to gain customer insight and access to others in the network of participants are the indirect values of collaboration, and while these do “not influence the performance of the company directly within that relationship or at a particular moment in time, but are nevertheless important for the future development of the firm” (Walter, Ritter & Gemunden 2001, p372). While the direct benefits play a critical role for motivating a participant to join an Extra-Organisational Collaborative process, the indirect benefits will have a larger influence on the future relationships and collaborative endeavours that firms will seek to engage with.

The Reflect stage allows the participants to understand how they could extract both direct and indirect value from the collaboration process and to extend the value from the process into other collaborative efforts, markets or customer groups.

2.8 Conclusion

This chapter reviewed the theoretical literature relating to the parent disciplines of the firm, value creation, customer co-creation and business collaboration. Building on the concept of S-D logic the discussion in the chapter develops support for the establishment of process framework to build new co-created value. This was followed by an explanation of the immediate discipline of Extra-Organisational Collaboration in the Creation of New Business Value. The discussion facilitated the detailed process which forms the basis of the research problem that will be tested by the case study work detailed in Chapter 4.
CHAPTER 3

METHODOLOGY
Chapter 3 - Methodology

3.1 Introduction

The purpose of this study is to examine the extent to which the Extra-organisational collaboration process is a valid approach for the creation of new business value. Chapter 1 of the thesis outlined the problem that merits this matter being the central subject of a study. Chapter 2 discussed the way the concepts of collaborative business value creation have been explored in the literature, and acknowledged gaps within the current literature that this study can help to develop. Included in Chapter 2 was a description of the process of Extra Organisational Collaboration as proposed by the author. The purpose of Chapter 3 is to describe and justify the design of the research study discussed in this thesis.

The research problem can be concisely framed as the way of defining and understanding the processes for formation, management and the structuring of relationships between customer and supplier firms as they collaborate to manage the process of business value creation, innovation and knowledge creation. S-D logic has signalled a trend toward increasing customer collaboration in the creative process has been partnered by a growth in inter-firm collaboration for developing new business value. While many scholars have discussed S-D logic and the processes involved in customer co-creation, the work on inter-firm collaboration to support this process has only been covered to a limited extent.

Studies to enhance the body of knowledge in this area have been limited, as the existence of extra-organisational collaboration is not obvious when examining the phenomenon from the customer side of the analysis. Likewise, much of the discussion on S-D logic has centred on idea of co-creation. These discussions highlight the need for different approaches for managing co-creation under a S-D logic perspective and highlight the need for businesses to rethink the way they interact. The literature recognised several benefits from firms engaging
in co-creation and that these benefits extend to improved employee engagement, better management and coordination of the supply chain, improved shareholder commitment and overall a better outcome for firms (Frow et al, 2015). Aarikka-Stenroos and Jaakkola (2012, p 15) argue that while the S-D logic “view emphasizes the collaborative nature of value creation, but particularly empirical research investigating what those joint activities are remains silent”. Extra-organisational Collaboration as described in this thesis attempts to provide a starting point for better understanding how a network of firms and their customers work together in undertaking co-creation.

**3.1.1 The Difficulties of Studying the Internal Processes of Firms**

Gaining access to study this process from perspective of participating firms is difficult and complex as many firms are keen to protect the commercial advantages often available from successfully executing extra-organisational collaboration. Bryman (2003, p2) supports the view that “many organisations are resistant to being studied, possibly because they are suspicious about the aims of the researcher”. The nature of creating new business value makes access to data and information even more difficult to understand as the area of value creation is at the heart of a firm’s competitive advantage and commercial future. As this form of collaborative endeavour is more likely to reside within the small and medium enterprises, or at a minimum involve these firms as partners with a larger firm, accessing information that is relevant can be somewhat difficult. This difficulty arises because many businesses are not required to be as open and transparent as large public entities. Small and medium enterprises, by a range of definitions, provide a significant percentage of most economic activity and their role in providing entrepreneurship is major factor in value creation (Hill & Wright, 2001). The entrepreneurial nature of many small and medium enterprises are “characterised as largely confused, chaotic, unstructured, certainly non-linear
and time compressed” (Hill & Wright, 2001 p 434), which add significant difficulty to the processes of engaging them in research endeavours.

Capturing a full understanding of the business practices and to comprehend their meaning for business value creation requires the researcher to “embark on an in-depth research program which not only is qualitative but also manifests much of the ethnographic tradition” (Hill & Wright, 2001 p 434). The other difficulty in observing this process by examining a single actor in isolation from the process is the importance of the “interplay between shared vision and trust, and between commitment and engagement, that strengthens the relationships and lays the foundation for effective joint innovation” (Cantu et al, 2015 p 959) means that valuable insight is not gathered. Undertaking analysis of the firms involved in the co-creation process from the perspective of a participant provides an opportunity for the researcher to access a broader spectrum of information about the co-creation process.

The study will be undertaken using an interpretive approach, which allows the subject matter to be understood “in depth and with a level of sophistication without a statistically secure universalisation of the findings” (Hackley, 2003 pp7-8). Hackley (2003) also argues that an interpretive approach will enable the analysis of the subject to develop specific insight on an emerging issue within the context of the operational environment. This study is designed to extract the observations of the process of extra-organisational collaboration by referencing the author’s experience in three separate cases where the process was practised and developed over time. The study will use the data derived from each experience to develop insight into the relevance of this process as method of creating business value, and to further understand any success factors and limitations that might apply to the process that would be the cause for greater quantitative analysis. This approach is consistent with the views of Carson et al. (2001, p64), who argue that “Interpretive research is often predominantly semi-
structured, or sometimes entirely unstructured, in gathering empirical data, for example a researcher’s ethnographic immersion in a longitudinal study”.

3.1.2 Philosophical Context

The norms of the scientific community govern the way in which researchers conduct their research by establishing a set of informal rules, principles and values (Neuman, 2011). These norms form the basis for the scientific method, which is underpinned by the scientific attitude, or the way in which people examine the world around them (Grinnell, 1992). Grinell (1992, p1) states that “when people act as scientists, they are engaged in a special kind of detective work that includes gathering evidence about the regular features of observed natural events and imaging hypothesis to explain these irregularities”. Gauld (1982, p109) suggests that “the scientific attitude represents the motivation which converts this knowledge and skill into action and refers to a willingness to use scientific procedures and methods”. Rao (1997, p3) suggests that the scientific attitude is central in building acceptance by society, as “the fruits of scientific discoveries in one country are enjoyed by people all over the world”.

Society’s trust in science is paramount to enable the acceptance that the knowledge established has been subject to a robust scientific method that removes the risk to the community that the science cannot be applied in the real world or have unforeseen impacts on the community. Undertaking interpretive research requires the researcher to subscribe to a hermeneutic approach to transcribe their data into a text form and “to engage in a cycle of re-interpretation and substantiation. The researcher engages with the text to draw meaning from it. The meanings that the researcher reads in the text are then communicated in the research report and substantiated with examples” (Hackley, 2003 p10).

Criteria have been developed that assist the researchers using this approach to demonstrate that they have “applied a hermeneutic approach with critical reflection to the social and
historical background of the study and their own role in it; they have demonstrated multiple interpretations of the participants and shown how data findings sometimes contradict earlier theory, and related the findings to theory showing sensitivity to biases and distortions” (Walsham, 2006 p326). The demonstration of the application of these principles allows the researcher to substantiate a level of truth in the value of the insight presented.

Case-based reasoning is an enquiry approach that allows the researcher to utilise the specific knowledge gained from the experience of a prior activity and event (Aamodt & Plaza 1994). The field of business management research is a continually evolving field as access to data, knowledge and practice becomes more readily available or observable. As most business activity, and value creation, is an outworking of problem solving practices case based research appears to be a natural “by-product of problem solving” (Aamodt & Plaza, 1994 p3). A multi-case design will add greater weight to the case study method by allowing generalisations from the cases to be applied to the theory and provide greater confidence in the evidence that supports the theory and in the method of analysis (Zainal, 2007).

One of the key factors contributing to a dearth of empirical data and research in collaborative value creation has been the prevalence of small and medium sized firms engaged in the process of value creation. These firms tend to be privately owned and operated and access to their data and key principals can be somewhat problematic due to the immaturity of formal systems. The leaders of these firms tend to be time poor and highly protective of their commercial success. Thus, accessing the inner workings of the firm in a formal research manner is subsequently quite problematic. Curran and Blackburn (2001, p5) argue that smaller firms are more difficult to study than larger firms as their “activities lack clear structures and recording procedures. Accordingly, measurement is much more difficult and propositions are more difficult to test” (Curran & Blackburn 2001, p5-6). The success of the case-based method as a method of recording the observation of embedded researchers
who have access to the inner workings of the firm enables greater insight to be obtained as
“unlike social science research in the community, organisational research often entails
substantial negotiation to obtain access to firms and their members” (Bryman, 2003 p2). A
research process that utilises the researcher/authors own experience while in a senior
leadership position within the firm allows access to the internal workings of the extra-
organisational collaboration. These observations enable the processes that underpinned
collaborative value creation to be analysed and allows the hermeneutic approach to be
applied. The approach also provides a method for the further validation of the results against
a theoretical framework identified in the literature review and provides a basis for the
analysis to be tested via other forms of research. In this research thesis, the results are used to
validate the process of Extra-Organisational Collaboration defined in chapter 2.

3.1.2 Paradigmatic context

This study will report on the findings of three case studies as they relate to an organisation’s
participation in instances of extra-organisational collaboration to create new business value.
The choice of the case study method has been made based on “a variety of assumptions
regarding the nature of the knowledge and the methods through which that knowledge can be
obtained, as well as a set of root assumptions about the nature of the phenomena to be
investigated” (Morgan & Smircich (1980 p491).

The qualitative approach is seen as a “rejection of the scientific method by virtue that people
are fundamentally different from objects which constitute the natural scientist’s subject
matter” (Bryman 1989). Davis (2005) argues that qualitative research is ideal for exploratory
research and is a useful approach in understanding the problem, particularly when the
prevailing understanding of the problem is low. The epistemological position of the
interpretive approach used in this study allows the social world to be studied from the
perspective of its participants. The study will take on a perspective of critical realism, Geertz (1973, p8) describes the interpretive view as “what we call our data are our own constructions of other people’s constructions of what they and their compatriots are up to”. This position acknowledges that studying the behaviour of managers in a value creation process involving multiple firms, with their distinct practices, cultures and operational paradigms is an acceptable approach, as such phenomena can be best observed via the human interpretation. Thomas (2006, p37) states that “Explanation in the social world is therefore possible but not according to the positivist scheme of covering laws”. Thomas (2006) also suggests that science is a process of constructing knowledge and there are a variety of suitable methods for constructing the knowledge and qualitative methods have a valid place in the process of discovery.

3.2 Research design

The research design describes the planning and structuring of a research report and includes a discussion about the process of collecting data through to an interpretation of the research outcomes and the approach used to realize the outcomes of the research. The research design presents the overall strategy used to integrate the different components of the study in a coherent and logical way, ensuring the research problem is effectively addressed (De Vaus, 2001). The research relies heavily on the participant–observation activities of the author who was an active member of one of the firms central to the collaborative processes described in the documented case studies.

In organisational research, the researchers often focus on the construct elaboration, which requires constructs to be formulated so the researcher can measure and “delineate a domain of attributes that can be operationalized and quantified as variables” Gioia, Corley & Hamilton (2012, p17). While construct formulation, measurement and analysis are important in helping
the researcher to make sense of the organisation, the approach sometimes restricts the researcher from engaging in the process of concept formulation (Gioia, Corley & Hamilton, 2012). Concepts allow a researcher to capture the qualities that describe or explain a phenomenon of interest. Critical to the formulation of concepts is the involvement of “knowledgeable agents” (Gioia, Corley & Hamilton, 2012 p17) who operate within the organisations being studied and report on their experience and use concepts to attempt to make sense of the phenomena they are observing. The use of case study reporting in the research design is an attempt to capture the observations and experiences of the author as they relate to the role the process of extra-organisational collaboration plays in guiding the creation of new business value.

The development of the model of Extra-Organisational Collaboration discussed in this research was developed based on the observations of the author as he participated in three examples of Extra-organisational Collaboration to create new value. Kawulich (2005) suggests that conducting observations involves a variety of activities and considerations for the researcher, including the management of the ethics of the research, building relationships and rapport, identifying key information sources, developing a process for undertaking the observations, establishing field notes and supporting data sources, and writing up one's findings. This analysis is then formed and reported through a series of case studies that document the outcomes of the researcher’s observations.

3.2.1 The Case Study Approach

The case study approach undertaken provides an in-depth study of the research problem, and builds understanding the Role of Extra-Organisational Collaboration as a process for creating new business value. The case study approach was chosen rather than a sweeping statistical survey or other form of quantitative work as the case study process will enable the research to
narrow down the learning from studying a few easily researchable examples (Yin, 2003). The case study research design will also allow the specifics of the Extra-Organisational Collaboration model to be examined in the real world and develop a better understanding of the ways in which the model can be applied. As little is known about the operational characteristics of this phenomenon, the case study process will enable these to be framed against an operational reference point.

The case studies were selected via a non-random convenience and judgmental/purposive sampling method from several value creation exercises undertaken by BW over an eight-year time frame. Research was limited to three individual case studies as the basis for the testing of the process of Extra-Organisational Collaboration, thus limiting the cost and time required to recruit participants, collect data and document the case studies. The specific cases selected were chosen based on the judgement of the researcher because they included distinct customers, a customer firm and multiple supplier firms that could be easily identified, and the process of creating the new value was done in a collaborative manner. The population size of possible cases to be included in the research was limited because the cases needed to include BW as a participant in the value creation process.

3.2.2 Participant-Observation

The commercially sensitive nature that characterised the organisational behaviour of the firms engaged in building competitive advantage through value creation necessitated the researcher to be an active participant in the organisations. Without being an active participant in the process, the researcher would have struggled to access data about the organisational behaviour, values and levels of trust between co-creative actors. Research examining the behaviour of groups and organisations creates several difficulties for researchers to remain rigorous in the application of the scientific methods common in laboratory based research.
(Gergen 1982). In organisational research “many of the most interesting problems are not necessarily suitable for laboratory research, for example to introducing multiple organisations into a laboratory to study the collaborative behaviour during the process of value creation is highly impractical (Shani et al, 2007). Shani et al, (2007 p17) suggest that “Collaborative management research often must rely on testing a model in practice rather than conducting controlled experiments”.

The case study approach used to establish the nature of Extra-Organisational Collaboration is based on the technique of participant-observation. Yin (2003) states that participant-observation is a case study method where the researcher is not a passive observer of the phenomenon being research. Under this approach, the researcher participates in the activities that are the subject of the research.

In the case of Extra-Organisational Collaboration research activities, the author was an active participant fulfilling the role of Executive Director of Marketing at BW. Jorgensen (1989, p12) claims that “the methodology of participant observation is exceptional for studying processes, relationships among people and events, the organization of people and events, continuities over time, and patterns, as well as the immediate sociocultural contexts in which human existence unfolds.” Jorgensen (1989, p14) further argues that “the methodology of participant-observation aims to generate practical and theoretical truths about human life grounded in the realities of daily existence.” DeWalt and DeWalt (2002, p8) suggest that participant-observation “improves the quality of data collection and interpretation and facilitates the development of new research questions or hypotheses.”

Jorgensen (1989, p 16) suggests that “the methodology of participant-observation aims to provide practical and theoretical truths about human existence. From this standpoint, a “theory” may be defined as a set of concepts and generalizations. Theories provide a
perspective, a way of seeing, or an interpretation aimed at understanding some phenomenon”. The active participation of the researcher in the operations of the BW business stimulated the idea of the idea of Extra-Organisational Collaboration as process for co-creating new business value. Kaplan (1973, p127) argues that “observation is purposive behaviour, directed towards ends that lie beyond the act of observation itself: the aim is to secure materials that will play a part in other phases of inquiry, like the formation and validation of hypotheses”. Kaplan (1973, p127) goes onto suggest that “observation is a search for what is hidden, not just because it is hidden, but because its exposure will facilitate an intimate, sustained, and productive relationship with the world”.

Yin (2003) argues that participant-observation provides some unique advantages for collecting case study data; however, the process also has some significant shortcomings: “The most distinctive opportunity is related to your ability to gain access to events or groups that are otherwise inaccessible to study” (Yin 2003, Location 2302). The participant-observation approach also allows the researcher to portray the insiders view and provides a more “correct” view of the phenomenon as the approach provides an improved context over a case approach centered only on secondary data analysis. While some specific advantages of this approach enable organisational phenomena to be more readily analysed, participant-observation also presents the researcher with some methodological challenges.

Kawulich (2005, p3) argues that the information collected by the researcher “is not representative of the culture, as much of the data collected by these researchers is observed based on the researcher's individual interest in a setting or behavior, rather than being representative of what actually happens in a culture.” Kawulich (2005, p5) further suggests that “participant observation is conducted by a biased human who serves as the instrument for data collection; the researcher must understand how his/her gender, sexuality, ethnicity, class, and theoretical approach may affect observation, analysis, and interpretation.” Yin (2003)
claims that four key shortcomings arise in participant-observations: first, the possible need to advocate for an interest opposed to the intent of the social science; second a tendency to follow commonly known phenomenon; third the participant role dominants the observer role; and fourth the difficulties that arise from a geographically diverse organisation. While the difficulties associated with participant-observation present opportunities to bias the process of observation, the commercially sensitive nature of value creation necessitates the need to observe and test the process in practice rather than in a laboratory environment.

3.3 Specific Research Design and Procedures

The specific research design is based around the development of three case studies describing three instances of value creation during which the author was an active participant. The three case studies represent an evolution in the thinking of the author and the development of the idea of Extra-Organisational Collaboration. The three cases provide a comparative perspective and to test the concepts within the Extra-Organisational Collaboration model across more than one experience. The cases selected provide a variety of attributes in terms of the nature of the participating firms, the involvement of the customer in the creative process and nature of the value creation activities being undertaken. Studying multiple cases provides a longitudinal, cross-sectional and comparative perspective which allows for greater variance in the analysis undertaken (Garson, 2013).

The cases were chosen to ensure a variety of customer engagements and firm size interactions, where a customer, a customer firm and supplier firms could be identified, and could be examined to provide a stronger framing of the causal path to facilitate the development of future quantitative research activity. The cases will test two separate propositions that are central to the Extra-Organisational Collaboration Model: (i) the role of the collaboration coordinator in ensuring the success of the value creation activities within
the collaborative environment; and (ii) the relevance of the collaborative process to the successful creation of new business value. Yin (2003, p47) argues that the use of multiple case studies provides “repetition logic” which means that the cases selected either allow the researcher to replicate their findings or utilise differences identified to illustrate contrasting results. The three cases chosen were chosen as they were critical for the research because the “dimensions of the case illustrated a sufficient cause for the phenomenon of interest to occur” (Garson, 2013, Location 146)

The data collection process for this research is based on participant observation where the author was an active participant in the creation of business value. The process also utilised a series of archival documents that give credence to the occurrence of the events documented in the cases and provide evidence of the timelines presented. Research data collected from emails, documents, contracts, notes and from the author’s memory were used to compare the activities within the case with the process of Extra-Organisational Collaboration. As Executive Director of BW the author was involved in the three case studies presented at detailed operational level. The cases were developed to show the evolution of the value creation process and the stages of activity that were undertaken by the firms involved.

3.4 Justification of the Research Methodology

The research process utilised the experiences gained by the author over 20 years of professional practice building new business value within the operations of three large corporations and as a part owner of an IT start-up business to develop the basis of the Extra-Organisational Collaboration model of business value creation. Subsequently, the examples described in the three cases were used to provide meaning to the Extra-Organisational Collaboration model conclusions in an iterative manner. Mintzberg (1979) argues that the anecdotal data of case study development allows the researcher to engage in theory building
in an attempt to describe the relationships that exist between the model and its operationalisation. Bendassolli (2013, p1) acknowledges that “Knowing facts is equivalent to identifying their causes and effects. However, observing facts, describing them in their manifestation, does not amount to science. There must be a leap from the visible to the invisible, herein lies induction: knowledge building evolves from single facts to a general belief regarding their causes”. Corley and Gioia argue that “papers that are deemed to provide a theoretical contribution rests in a scholar’s ability to produce thinking that is original (and especially revelatory or surprising) in its insights and useful (preferably in a scientific manner) in its application (2011, p18).

Applying the case study approach allows the researcher to extract understanding and allowing the description or demonstration of conceptual models by allowing the researcher to undertake detailed contextual analysis of a limited number of case histories (Yin, 2003). A researcher may use case study research to capture the insight from a variety of sources used to investigate the research problem (Stake, 1995). Pettigrew (1988, p269) discusses that the sample cases chosen need not be statistically valid to represent the entire population of firms, but that the researcher should choose cases which are “transparently observable”. Eisenhardt (1989, p537) argued that “the goal of theoretical sampling is to choose cases which are likely to replicate or extend the emergent theory”. This research design is particularly useful for understanding contemporary real-life business activities and provides the basis for the developing greater understanding and testing the concept of Extra-Organisational Collaboration.

**3.5 Quality Control of the research**

The quality control processes applied to the case utilised a number approaches to validate the quality of the case narrative being presented in the research.
<table>
<thead>
<tr>
<th>Quality Control Mechanism</th>
<th>Supporting Processes of Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility</td>
<td>▪ Conducted a series of conversations with other participants of the cases to validate the detail of the process and activity</td>
</tr>
<tr>
<td>Dependability</td>
<td>▪ Reviewed email and other notes to validate the timings and activities of each case</td>
</tr>
<tr>
<td></td>
<td>▪ Utilisation of material published on the web to validate the occurrence of the value creation activities</td>
</tr>
<tr>
<td>Confirmability</td>
<td>▪ Utilisation of material published on the web to validate the occurrence of the value creation activities</td>
</tr>
<tr>
<td>Transferability</td>
<td>▪ Clear articulation of the phases of Extra-Organisational collaboration in the description of the case to enable other researchers to use the model proposed.</td>
</tr>
</tbody>
</table>

Table 3.1 Table demonstrating the criteria used to validate the quality control processes used during the preparation of the cases based on a model presented by Houghton et al (2013, 13).

3.5.1 Credibility

Qualitative research using case studies as a primary method of presenting and reporting the analysis utilises arrange of techniques to provide credibility to the researcher’s claims, including highly detailed or thick descriptions, triangulation with other sources of research, peer debriefing, and member checking. The central process for assessing the credibility of the case studies presented involved a series of conversations with key participants in the case studies presented. Discussions were held with key BW staff involved in the process to validate the recollections and notes of the researcher.

3.5.2 Dependability

A key to ensuring the dependability of the cases requires the researcher to provide evidence that the research was conducted in a professional and reliable manner. The researcher has
utilised emails and other documentation to provide evidence of the value creation processes undertaken.

3.5.3 Confirmability

The ability to replicate the research or to use other research methodologies to support the findings of the research. The research has developed a comprehensive model against which other collaborative value creation processes can be tested.

3.5.4 Transferability

The transferability of the findings of the research is made possible by the detailed description of each phase of the collaboration process and the articulation of the roles of the collaboration coordinator, customer firm and supplier firm. In addition, the role of the “Hub” firm provides additional insight for researchers to gain a better understanding of the forces driving Extra-Organisational Collaborations.

3.6 Limitations

The small number of cases being studied does not provide a strong basis for establishing reliability or enable the findings to be generalized to a wider set of firms. Case study research will only allow the researcher to eliminate components of the model as several alternative theories may also be valid explanations of the phenomena. The deep exposure and participation in the events that are used to frame the case study may bias a researcher’s interpretation of the findings (Aamodt and Plaza, 1994). The use of the case study to test concepts rather than deeply defined constructs alleviates some of the bias risk that the case study inherently introduces.

The author acting as a participant-observer while providing advantages in gaining access to subjects and information also introduces a number of limitations. There is some risk that bias
will enter into the research as the view presented is that interpreted and inferred by the author. In addition, participant observation does limit the size of the data set that can be drawn upon for analysis.

The design process of the case studies limit the amount cause and effect relationships can be understood as vital information may be missing, restricting the ability of the researcher to accurately interpret the results (Yin, 2003). The reasoning for selecting the case limits the interpretation of the findings to that case. According to Guba and Lincoln (1985, p84), the construction of a reality “is undoubtedly incomplete and erroneous to some degree. Of course, constructed realities (or constructions) are often related to, and equally often inseparable from tangible entities. Guba and Lincoln (1985) argue that achieving pure objectivity is unattainable, although striving for balance and fairness are worth striving for and that researchers need to provide a useful system of checks and balances to maximise the opportunity for removing bias. Applying the findings to a broader context would require future research to be undertaken.

3.7 Summary

This chapter discussed the importance of establishing a paradigmatic view in conducting research and presented evidence to justify the selection of an interpretive view, while also considering alternative paradigms. With case study research and participant-observation gaining more relevance in educational dissertations, especially when examining phenomena in the social constructs surrounding the business community, the chapter discussed the validity of this approach and highlights the advantages and limitations of the approach. The chapter also discussed the processes used to ensure the quality of the research outcomes.
CHAPTER 4

CASE STUDIES
Chapter 4 – The Case Studies

4.1 Introduction

Chapter 4 presents the findings from three case studies. The structure of each case study broadly follows the logic of the research design: data about the observation of the participating firms in developing new business value through extra-organisational collaboration. The structure of case presentations is summarised in Figure 4.1.

This chapter presents findings from the CD, MT and CC case studies. The investigation of each case is based on the experience of the author as he played a central role as an Executive Director of BW, a core participant in all three case studies. Each case study description will examine the participating firms, and describe the details of the value creation opportunity. The case descriptions will then examine how the process of value creation occurred and discuss the outcomes of each process.
4.2 The CD Case Study

4.2.1 Introduction of the CD Case

The organisations directly involved in the CD Case include BW, CD and HD Sexual Health Clinics. The three organisations collaborated to create a secure messaging capability to assist sexual health doctors to communicate with patients as part of the treatment cycle for communicable sexual health conditions such as HIV, Chlamydia, and so on.

Prior to this case, Study BW had no commercial relationship with either CD or HD, however CD was supplying services to the HD Sexual Health Clinics. The BW CEO, of BW, and CD CEO, were both members of the local IT Forum. The local IT Forum was local business networking group that encouraged collaboration and provided a single lobbying voice for the local IT industry into the various government agencies at a local, state and federal level.

4.2.2 Overview of Case Organisations in the CD Case

4.2.2.1 CD Pty Ltd

CD is a privately held Australian firm based at Parkwood on the Gold Coast. The CEO, a former HD employee, created a basic software solution targeting health clinics throughout Australia to maintain patient records, as well as collect and report clinical data on several notifiable diseases to Government Health Regulators. CD was established in the early 1990s with the first Specialised Health Information Program designed in 1992.

The company operates primarily in the health sector, providing specialist information technology services. “CD specialises in the development of software solutions for the management and surveillance of sexual health, communicable diseases, HIV/AIDS, Hepatitis C, reproductive health, needle and syringe, and occupational risk exposure” (Ellem, date unknown). CD offered customers a specialised health information program branded as SHIP.
The software offered medical practitioners a comprehensive, flexible, secure and complete electronic patient record system. Through its success and worldwide use, SHIP has benefited more than 70 specialised health clinics. SHIP provides an extensive medical record, offering support to clinical and administrative staff assisting in the daily recording of patient information, test results, visits, treatments, and diagnosis. The application also provided accurate information for reporting in accordance with regulatory requirements.

In order to keep up with changing nature of information and communications technology, SHIP has evolved to meet the requirements and guidelines set by local, state and federal governments. In partnership with BW SMS messaging has been integrated into SHIP enabling clinics to send secure SMS text messages to clients informing them of their results, reminders for appointments and medications and allowing clients to access their results any time and from anywhere not just in clinic time.

4.2.2.2 HD–Sexual Health Service

The Sexual Health Clinic is a business unit of HD and provides a range of patient health, counselling and educational services about the treatment, risks and management of sexually transmitted diseases. While under the management of Senior Doctor the senior doctor, the clinic provided a live customer environment to assist with the development and design of the new value created for the CD business.

The Sexual Health Clinic was an existing CD customer using the Specialised Health Information Program for the management of the clinics customers being treated for HIV and other sexually transmitted diseases.
4.2.2.3 BW

BW is privately held information and communications technology company that specialises in the development of mobile messaging technology for business. BW was formed in 2001 in response to an opportunity to build SMS applications in the transport sector. In 2002 the author joined the firm as a shareholder and executive director. The firm developed a series of products targeting a range of applications environments. In 2003 BW commenced the process of registering several patents for technologies that evolved out of the firm’s core research and development activities. In 2004 BW launched a suite of applications and mobile messaging infrastructure services that formed the basis for the development of the CD business capabilities.

Milne (2007) said that “BW has developed core patented technology that provides our customers with a unique authentication and validation capability”. BW provided the entire mobile messaging infrastructure as a core messaging component within the end software solution provided to end customers. The company developed relationships with other key software developers and vendors to incorporate our core technology elements into their applications. The BW business was based on the Gold Coast, Australia but operated in multiple countries across the globe.

BW core technology differentiator was the product referred to as SMS AV or SecureTrans a server-based module that provides the ability to send secure SMS messages. Messages are encrypted when sent to recipients and can only be retrieved with the correct password sent from their cell phone (caller id is used). This ensures that only the targeted recipient can read the message and eliminates non-repudiation problems, as the sender will be notified of successful decryption. The application is carrier and phone independent, and does not require the need for modification to SIM cards.
In addition, encrypted messages could be sent inside multi-media messaging service (MMS) pictures, using steganography techniques. An image of a person can be used to verify an identity, while at the same time embedded content in the image can be used to transmit information.

In 2010 BW licensed its operational activities to OS a South Australian based information and communications technology business that continues to support the CD business and the customers of the Specialised Health Information Services program.

4.2.3 Analysis of the CD Value Creation Opportunity

The Sexual Health Clinic had implemented the Specialised Health Information Program with the intent of providing better management of sexually transmitted diseases, tracking the interaction with patients over the course of time and keeping the patients informed of their treatment regime. A central patient communication issue that needed to be resolved was the timely and confidential communication of initial and regular medical test results. As with all communicable diseases, the medical practitioner has a legal requirement to ensure the patient is informed of the status and results of any testing regime that the medical practitioner may undertake. A significant issue facing health clinics is the timely distribution of test results “many organisations have previously relied on certified mail to distribute test results, which often introduced delays into the treatment process and added significant administrative overhead in the advising customers of test results” (Milne, 2005). Certified mail had proven an unreliable communications approach for engaging clients of the sexual health clinic for several reasons with the two major reasons being the transient nature of many suffers of HIV and other sexually transmitted diseases and the embarrassment suffered by patients receiving personal communications from a sexual health clinic. The difficulties with the certified mail
delivery method created administrative and cost constraints for the clinics, as they then had to allocate already scarce administrative resources to undertake outbound calling.

The value opportunity was to use the ubiquity of mobile messaging technology to provide a robust communications platform for engaging with patients as part of their treatment regime.

During 2004 BW provided CD with the SecureTrans software module which utilised its patented SMS Authenticate and Verify (SAV) technology for an innovative solution using SMS as a key patient communication platform (Milne 2005). The secure nature of the SMS Authenticate and Verify product meant that patients with communicable diseases could be communicated with in real-time in a secure and private manner.

4.2.4 Description of the Process of Value Creation using Extra-Organisational Collaboration

The following section of the Case describes the process followed by the participants in the creation of value in the CD case. The section will be described in accordance with the model of extra-organisational collaboration described in Chapter 2. The analysis will begin with the Awareness stage in the process and end at the reflection stage of the process.

Awareness

During a local ICT event, BW CEO and the author (BW), CD CEO and the senior doctor of SHC were discussing the issues confronting the SHIP program. The conversation centred on the difficulties Sexual Health practitioners had communicating with HIV patients using certified mail. The senior doctor informed the others in the group that in many jurisdictions Medical Practitioners had strict guidelines for validating if a patient, who was diagnosed with a sexually transmitted disease, was advised of the outcomes of testing. Medical Practitioners were required to show evidence that the patient had been contacted and advised of the
outcomes of any testing. Traditionally certified mail services had been used as the primary method for initiating contact with patients.

The use of certified mail was proving difficult for medical practitioners as many of the patients were young, mobile and receiving certified mail from a sexual health clinic was embarrassing for the patient. The low success rate of the certified mail process had resulted in administration staff in the clinics having to outbound call the patient to report the outcomes of patient tests. This use of outbound calling was “resulting in delays reengaging with patients and proving a very costly to the clinics” (Senior Doctor, 2008).

Motivation

The motivations of the participating parties were initially centred on the need to satisfy a personal problem that confronted each organisation. In the case of the HD Sexual Health Clinic, the cost, both financially and resource wise, and the risks associated with the inability to advise patients of their results of a positive HIV test were making it operationally difficult to continue to use a certified mail notification approach. Senior Doctor (2007) had estimated that the certified mail cost alone for contacting patients was approximately $US2 per patient and 90% of the contacts were in relation to negative test results. Over the course of the year, these costs in conjunction with the high percentage of failed contacts that required clinic staff to initiate a phone based contact was weighing heavily on the operations of the clinic.

CD operated in a very competitive market, the information and communications technology industry was undergoing a significant paradigm shift when it came to the cost and time to develop customer specific application, creating both opportunity and threats for businesses who specialised in a specific field. In the case of CD, the opportunity presented by this disruption allowed them to package up their intellectual property relating to the management of sexually transmitted diseases into a specific practice application. The threat to CD came in
the low cost of entry other information technology firms encountered in building a similar 
application. CD was keen to provide sexual health clinics and practitioners with a solution 
that solved the entire patient care cycle, and the post-test management process was an area 
where they felt there was an opportunity for creating a differentiating benefit.

BW had recently developed their patented authentication and verification technology that 
operated over mobile communications platforms. The company had undertaken significant 
work with the legal community to validate that authentication and verification processes that 
occurred using this technology would stand up to any challenge from participants requiring 
proof of authentication or verification. The technology was unique in that it allowed 
companies and their customers to contract using a standard text message (SMS message) as 
part of their business processes. BW was keen to develop the product in an operational sense 
to use as evidence of the technologies value in future sales and capital raising activities.

As the parties discussed these motivations, it became clear that an opportunity to collaborate 
would enable all three participants to develop new value that would deliver a solution and 
satisfy the motivations of each of the parties.

Enlistment

The enlistment process occurred over a series of discussions, between the collaboration 
partners, to test the concept. The discussions during the enlistment process gauged the level 
of interest each party had for participating in the development of the identified opportunity to 
create new business value. As none of the groups had previously worked together the three 
parties signed a mutual statement of confidentiality which enabled them to discuss the value 
creation opportunity in specific detail to test the opportunity to develop a commercial 
offering. In this instance, BW took a lead role in coordinating the enlistment process, and 
during this process established one of its employees as the collaboration coordination. The
process of enlistment was simple and quite straightforward as the key decision makers in each of the participating parties, Senior Doctor (the customer), CEO of CD, customer firm and the CEO of BW, supplier firm, were involved in the enlistment process.

Mediation and Synchronisation

The process of mediation and synchronisation was a quite involved process for a variety of legal and financial reasons. Mediation identified some significant legal issues that had to be resolved before the opportunity could proceed, including: (i) ownership of risk and liabilities if patient communications failed and a client of the clinics who had tested positive to sexually transmitted disease was left uninformed or patient treatment information failed to deliver; (ii) protection of the intellectual property rights of CD and BW and (iii) management of data privacy given the sensitive nature of the messaging subject matter. These issues were resolved by establishing a legal framework that enabled all the parties to participate with a clear understanding of the rights and obligations of each of the parties.

The development of the agreement also enabled CD and BW to define the operations of the commercial elements of the agreement. Developing an understanding of the cost of the existing mail and phone call based processes operated by the clinic allowed BW and CD to build a commercial model that provided financial and resource efficiency benefits to the clinic and enabled both organisations to build a financial basis for their value that continues to operate in 2014. The agreement also provided CD with the opportunity to exploit the new capability and BW’s intellectual property in other markets such as east Africa, Ireland and Europe where they had supported other sexual health businesses. This framework gave BW entry into those markets as part of a broader partnership arrangement with CD.
Sharing

Following the establishment of an agreed legal and commercial position BW, CD and Clinic staff came together for a series of sharing workshops where the detail of the problem was unpacked and an agreed end state of the collaboration was identified. This process allowed the technical and functional experts in the three organisations (customer, customer firm and supplier firm) to form a shared view on what success would look like. This process included sketching up how the user experience and patient experience would operate. The sharing process enabled the parties working in the collaborative endeavour to build trust in each party’s strengths and weaknesses. Interestingly, during this phase of the process, the team from BW could provide some non-project related advice to the CD team about the efficiency of their software operation, which stimulated significant improvements in the overall CD application.

Defining and Creating

The detailed definition, design and development of the solution which incorporated data schemas, process flows, detailed user experiences and testing processes were created in a collaborative manner using an iterative design and build process. During this process, the technology development manager at BW played the role of collaboration coordinator, facilitating the development process by coordinating team interaction, expediting decision processes, and managing conflict. Conflict was minimal during this process and arose from either underestimating the time taken to complete a task or from failure by the customer to fully appreciate their role in the creative process given their focus on the operational matters of the clinic.

The extra-organisational collaboration team identified several opportunities to make each other’s offer more effective or operationally more efficient and because of the level of trust
the technical specialists built up during the collaborative process, and many of these suggested improvements were undertaken. Consequently, as an outcome of this process, CD’s technical team completely rewrote their core application moving to a Microsoft.Net platform because of the operational efficiencies they observed in the BW team. BW staff provided extensive advice, experience and support during this process.

Reflection

The collaborative exercise was considered a success by all the participating parties for several reasons. The benefits of the collaboration could be separated into two classes of benefits direct and indirect. The direct benefits of the collaboration were the reduced transaction costs incurred by the clinic in servicing their patient base, the establishment of a new revenue stream for both CD and BW. The indirect benefits of the collaboration included the establishment of relationship between CD and BW, a strong level of trust between the technical staff of the respective organisations, a client that was willing to actively advocate for the solution in the engagement of other customers and the establishment of a case to prove the validity of the BW intellectual property.

The relationship between developed between CD and BW during this collaborative endeavour has continued over many years and the two firms continue to engage in the delivery of services to the sexual health industry.

4.2.5 Outcomes of the Value Creation Process

The Extra-Organisational Collaboration Process employed here by BW, in conjunction with CD and HD in this instance, successfully delivered new business value to both BW and CD that could be monetised with customers. The value creation process engaged a customer which enabled the value creation outcomes to be successfully promoted to other customers involved in the management of sexual health. The strong involvement of the operational
teams of the three participating parties in designing and creating the end product meant that the collaborative effort received a high level of engagement and commitment to the relationship.

The role of the collaboration coordinator was critical to the success of this collaborative endeavour. During the collaborative process, the coordinator kept the team on task, and continually validated progress against the desired end-state and managed conflict in a positive and successful manner. The fact that the collaborative partner was selected from among the BW team as the person had a vested interest to ensure that the technology deployment was successful. Validated their ability and personal creativity in their formal role of technology development manager in which they had created the base intellectual property and enjoyed the rewards of their intellectual property being developed into a commercial offering through the collaborative endeavour.

The ability of the participating team members to advance the outcomes of the collaborative endeavour motivated these team members to work collaboratively on future projects together as the businesses expanded the outcomes of this collaboration into other international markets. The existing customer relationships of CD were a critical component of the process, as BW could build on the trust that existed between the sexual health clinics and CD, a poor relationship with low levels of trust would have reflected on BW and the end customer may not have been prepared to take the risk on BW’s new technology.

4.2.6 Contribution to the Theory of Extra-Organisational Collaboration

The collaborative endeavours outlined in the CD case were the germination of the concept of Extra-Organisational Collaboration to create new business value. The initial conversations that were held between the participating parties were largely focused on the problem or opportunity to create new value. The success of the approach triggered the interest in the
author to further explore how collaboration could be used to create new business value. Prior to this collaborative endeavour, BW had been employing traditional sales approaches based around engagement with end user customers attempting to solve their organisational problem from a very narrow frame of capability.

Early in the collaborative cycle, the identification of the three distinct roles evolved, the customer, the customer firm and the supplier firm. The contemplation and observation of the deep relationship that existed between CD and their customer engaged in a relationship to address a key issue confronting the customer. The presence and strength of this existing relationship was a key determinant of the firm playing the role of the customer firm. Within the role of customer firm, the underlying relationship gave CD a distinct advantage over other firms as they had an intimate knowledge of the problem and were an active part of the customer solution. Insight shared between CD and the client was a significant barrier to entry. The strength of this entry barrier was patently pointed out by the HD when they indicated that while BW could certainly assist them with the management of patient communication, the solution could not be independent of CD. The HD indicated that working direct with BW would introduce costs to HD that outweighed the singular benefit BW could provide.

The need for BW to provide a service to the end customer via the CD system was the origins of the idea of the supplier firm, and the role that the supplier firm might play in adding value to the customer via the customer firm. The strength of this concept was supported by the interest that CD showed in the value that BW could add to their customer, but a simultaneous absence of interest in creating the solution themselves. The absence of interest was driven by several factors including a dearth of technical skills, experience and expertise and a deficiency of available capital to invest in the development in the capability needed by the customer. The existence and participation of the supplier firm in the value creation process enabled the client and the customer firm to access the core skills and capabilities needed to
deliver the much-needed improvement to the treatment of HIV patients. The identification of these key roles in the collaborative process highlighted the importance of creating relationships between complementary partners to enable the new value to be created.

During this process, an early framing of the collaboration coordinator was provided, as the Chief Executive Officer of BW assumed the key role of coordinating the process of forming and establishing the collaborative process. The existence and drive of the collaboration coordinator played a key role in providing guidance, motivation and focus to the development of the collaborative partnership. While this role was not specifically called out in this early instance of Extra-Organisational Collaboration, the actions of the Chief Executive certainly represented the role of collaborative coordinator and this role was identified as a key factor in the success of the collaboration.

An outworking of this collaborative endeavour and the identification of the various collaborative roles resulted in a significant change to the marketing and business development strategies employed by BW. Prior to the case being discussed, BW pursued a traditional direct to consumer or customer approach attempting to sell the company’s underlying technology and product platform to a range of customers. After the CD value creation exercise, BW assumed the role of the supplier firm to a much greater degree, actively seeking out customer firms within the business networks of the organisation members seeking to replicate the success achieved in the CD case.

**4.2.7 Conclusion**

The CD case is a strong example of Extra-Organisational Collaboration made possible by the strong client relationship CD held and the willingness of the collaborative team to work closely together to create the new value. Client trust and permission is essential to the success of an extra-organisational collaboration. Without an intrinsic level of trust in the brand of the
customer firm, extracting permission to engage and even more so converting the value created into something the client will purchase is a critical factor of success (Verhoef et al, 2009).

The role of the collaboration coordinator was critical to the success of the endeavour: providing clear solution direction and generating significant commitment from the participating team members. Identifying a collaboration coordinator who is open to working in a cross organisational collaborative manner is an important element of the Extra-organisational collaboration model. However, according to Ramaswamy and Gouillart (2010), most individuals are much more willing to co-create than organisations and it is up to managers to provide a framework for them to succeed. In this instance, the entire value creation exercise was framed as an exercise in extra-organisational collaboration and provided the collaboration coordinator with the intrinsic permission that they required to succeed.

The ongoing relationships that developed between CD and BW were very important to both firms and had their starting point in the positive emotional frame and trust that developed between the principals of the firm during the outworking of the initial collaborative exercise. Dyer and Singh (1998) have argued that collaborating firms generate long-term relationships by building a basis for monetising value via assets that provide the basis of the relationship, thereby developing a routine for sharing knowledge and building trust and an effective process for governing the relationship. Building from this initial collaborative endeavour, CD and BW built a long-term commercial relationship.
4.3 The MT Case Study

4.3.1 Introduction of the MT Case

The organisations directly involved in the MT case include BW, MT and MK. The three organisations collaborated to create a secure messaging capability for MT to enable it to accommodate a growing customer desire for more secure text messaging services. The case explores the creation of two branded versions of the service “Activating Love” and “Private Messaging” offered a period between 2005 and 2008.

Prior to this case study, BW had no commercial relationship with MT. However, MK was supplying services to the BW in the form of message delivery into South East Asia. While MK sold product to the same customer base as MT, they had no direct business relationship at the time of the commencement of the Extra-Organisational Collaboration. The BW and MK CEOs were introduced through a mutual contact in Kuala Lumpur.

On the back of this project BW was also invited to assist MT on a separate mobile messaging based project. This initial value creation opportunity failed to move pass the motivate stage due to technical limitations identified with the proposed solution. “Thank you for the opportunity to propose our SMS client solution for the MT HSDPA wireless broadband Internet service” was an excerpt of a letter sent to MT on 5 December 2006.

4.3.2 Overview of Case Organisations in the MT Case

4.3.2.1 MT

MT is a leading communications service provider in Malaysia, enabling both individual and business customers to connect and communicate using 4 G mobile communications technology. Today, MT has 13 million customers, while at the time of this case study the
number of customers on their network was between 4 and 5 million. MT has a distinct focus on building the customer experience as a key differentiator in their competitive strategy.

4.3.2.2 MK

MK is a mobile technology company that operates out of Malaysia. MK provides premium messaging and mobile application services to clientele right across Asia. Their technology was created for a very simple purpose: to allow businesses to leverage on the power of mobile technology as a convenient, effective and measurable communication tool. The MK offering comes with a diversity of features from which you can pick and choose, and provides multiple direct connections to mobile operators for two-way global messaging, as well as premium messaging connectivity worldwide. It is compatible with all leading mobile network protocols, and comes with integration options that make implementing, administrating and using our solutions simple for even the least technical of personnel.

4.3.2.3 BW

BW is a privately held information and communications technology company that specialises in the development of mobile messaging technology for business. BW was formed in response to an opportunity to build SMS applications in the transport sector. In 2002 the author joined the firm as a shareholder and executive director. The firm developed a series of products targeting a range of applications environments. In 2003 BW commenced the process of registering several patents for technologies that evolved out of the firm’s core research and development activities. In 2004 BW launched a suite of applications and mobile messaging infrastructure services.

“BW has developed core patented technology that provides our customers with a unique authentication and validation capability” (Milne, 2007, p1). BW provided the entire mobile messaging infrastructure as a core messaging component within the end software solution.
provided to end customers. “BW has developed relationships with other key software developers and vendors to incorporate our core technology elements into their applications” (Milne, 2007, p1). The BW business was based on the Gold Coast, Australia but operated in multiple countries across the globe. BW owned the intellectual property to a core technology differentiator referred to as SMS AV a server-based module that provides the ability to send secure SMS. Messages are encrypted when sent to recipients and can only be retrieved with the correct password sent from their cell phone (caller id was used to identify the correct phone).

4.3.3 Analysis of the MT Value Creation Opportunity

The MT case features the establishment of a process of Extra-Organisational Collaboration to deliver a private messaging service based on BW’s secure messaging platform SMS Authenticate and Verify. The value creation was initiated on the basis of feedback from key customers purchasing services from MT.

The value creation opportunity was to use the ubiquity of mobile messaging technology to enable customers of MT to send private messages to one another using SMS. The private messages could only be retrieved from the messaging server by the input of a personalised identification number. During 2005, BW provided MT with SMS AV software module that
utilised its patented SMS Authenticate and Verify (SAV) technology for an innovative solution using SMS as a key patient communication platform (Milne 2005).

4.3.4 Description of the Process of Value Creation using Extra-Organisational Collaboration

The following section of the case describes the process followed by the participants in the creation of value in the MT case. The section will be described in accordance with the model of extra-organisational collaboration described in Chapter 2. The analysis will begin with the Awareness stage in the process and end at the Reflection stage of the process.

Awareness

During a conversation with MT in relation to the introduction of BW’s Campaign Messenger software into a technology that platform MT was delivering, interest was generated by the product managers at MT when BW introduced them to the secure messaging products it had been developing. The product managers at MT had received feedback from some of their key VIP clients about the need to be able to secure messages sent to them on their mobile devices. While there was a definite interest in the product capability within the product management team, the private nature of the messaging meant that the messaging infrastructure would need to be established in Malaysia, something BW had yet to do. The meeting concluded with an expression of interest and a commitment by BW to investigate the feasibility of delivering the new value to MT. BW had introduced the concept to MK to test their willingness to participate in the collaborative endeavour with the aim of encouraging them to provide infrastructure capability to the solution, thus avoiding issues with the personal customer data of MT’s customers being stored offshore.
Motivation

The motivations of the participating parties were initially centred on the opportunity to develop a new product to satisfy a need that had been identified among the customers of MT. The core corporate strategy underpinning the MT business was the development of unique offerings which would differentiate the MT offering from that of its competitors Celcom and Malaysia Telekom. BW was keen to introduce the secure messaging technology into a mass market environment, beyond the limited scope of the previous implementations of the technology.

BW introduced MK, a firm that was in partnership with BW to deliver international SMS messages to the Malaysian customers of the other products in the BW suite. MK also had an existing relationship with MT providing mobile messaging content services to the existing MT customer base. MK were keen to further develop their relationship with MT given their growing customer numbers. As the parties discussed these motivations, it became clear that an opportunity to collaborate would enable all three participants to develop new value that would deliver a solution and satisfy the motivations of each of the parties.

Enlistment

The enlistment process occurred via a series of meetings and communications between the three parties held in Malaysia over the course of a few weeks. During this stage of the process, BW nominated its R&D Manager to lead the collaborative exercise as this person was based in Singapore. Access to the collaborative partners was simplified as the time zone and locational constraints to proceeding were lessened, thereby enabling all the parties to feel like this was a ‘local’ project. MT was a large hierarchical organisation with complex approvals processes and delegations that required the other parties to exercise a level of
patience in the decision process. Both BW and MK were smaller nimbler firms with flat structures that enabled decisions and approvals to be more readily managed.

Mediation and Synchronisation

The bureaucratic and hierarchical nature of MT resulted in an extended process of mediation and synchronisation which involved a number of ‘specialists’ within the MT organisation like the Chief Legal, and Chief Financial Officers. The process involved establishing engagement specific legal documentation which address the roles of each party and established the commercial arrangements. The public listing of MT meant that many activities that BW and MK had traditionally undertaken based on the trust in the relationship had to be clearly articulated in a formal legal agreement, which was developed in a much more transparent and legalistic manner. The documentation process also required the collaborating partners to clearly specify how the project would be delivered along with the roles of each party documented in some detail. Conversely, BW and MK could simply alter the terms of their existing agreement to cover the scope of the new work. The flatter structures of these two firms enhanced their responsiveness, adaptability and agility.

Sharing

Following the establishment of the legal framework and governance structure framing the relationship between the three parties the collaboration coordinator, the R&D manager from BW undertook a series of workshops to establish a shared view of the outcome that the collaborative endeavour would deliver. During this phase of the project, MT was much more responsive, investing much of the responsibility for delivering the new value in the hands of the product manager. The greater autonomy of the product manager, made the establishment of the shared collaboration vision a much simpler task. During this process, the collaborative team were also able to better define the roles and responsibilities within the project and
determine which organisation was accountable for the delivery of the various elements of the project.

**Defining and Creating**

The detailed definition, design and development of the solution were specified as an extension to the sharing process. Although BW had delivered their intellectual property as the part of other solutions, establishing the level of scalable capability required to support a company with over 4 million customers required significant input from both the broader technical team at BW and the technical teams at MT and MK. The process also had a much greater contribution from the marketing team at MT, who provided extensive insight into the customer interaction with the value offering and continued to refine the offering based on customer feedback well after the product was launched.

The creation process in this case followed a process which was more like the traditional specify, build, test, launch or ‘waterfall’ approach than the iterative design and build process that BW and MK were used to managing. This change in the process of creation was largely due to the more bureaucratic information technology processes of MT and greater level of risk aversion that tends to be observed in large organisations. The culture at MT used the bureaucracy to deliver discipline, whereas the cultures of BW and MK relied on self-interest to ensure that the quality outcomes of software projects. While these cultural differences produced some frustration within the teams participating in the collaborative endeavour, at no time did they become a hindrance or source of conflict, largely as the collaboration coordinator clearly articulated the needs of MT to the members of the team from BW and MK.
Reflection

The collaborative exercise was regarded as a success by all the members of the collaborative endeavour. MT launched the products on Valentine’s Day with a campaign based on the love messaging graphic displayed in Figure 4.2, while the campaign and value creation exercise resulted in a significant take up by MT customers, generating many thousands of messages a month. As this was BW’s first foray into a mass market product, the collaborative endeavour produced a much deeper understanding among the BW team about the capabilities they needed to support in a scalable, real-time market. The process also improved the relationship between BW and MK as they developed the capability to partner together to develop solutions for clients in the South East Asian market.

The process also exposed BW and MK to the difficulties working as small, nimble organisations with larger more bureaucratic firms, where the larger firm plays the role of the customer firm. Over time, the product manager went through a constant series of changes and as corporate responsibility for the private messaging service was transferred around MT, the ability of the other partners in the collaboration delivering value to influence the sales and growth in the product become increasingly difficult.

4.3.5 Outcomes of the Value Creation Process

The Extra-Organisational Collaboration Process employed here by BW, in conjunction with MT and MK delivered a successful product into the customer base of MT. The process was well managed by the R&D manager at BW and was delivered with a minimal level of conflict or adverse relationship behaviour. However, over time the ability of smaller firms to influence MT to maintain a focus on the promotion of the product became more difficult and eventually MT exited the product in 2008. The decision to exit the product was based on three key reasons: (i) the ability to maintain customer numbers on the product as smartphones
and new forms of mobile messaging evolved; (ii) the introduction of a new product manager who had not lived through the product’s creation and who was not committed to the product; and (iii) the lack of ongoing margin in the product to reward the three firms supporting the product.

The challenge for firms like BW and MK when dealing with organisations like MT is to move the collaborative relationship beyond the pursuit of direct benefits, and develop the deeper indirect benefits that come from a strong trust based relationship. Participants from smaller firms tend not to have the resources available to continuously work the relationship post the introduction of the new value to the customers of the customer firm. The participants in larger firms tend to be measured largely on their ability to affect direct benefits, whereas the participants of the smaller firms are not always centred on the direct benefits to the same extent. Resolving this issue will require the larger firm to recognise the value in indirect benefits and develop their culture and behaviours to reflect the need to access these benefits.

4.3.6 Contribution to the Theory of Extra-Organisational Collaboration

The MT case provided significant insight into the dynamics and processes firms must go through to create successful collaborative processes. While the case reinforced many of the role based principles uncovered in the previous CD case, the concepts that make up the value creation process of Extra-Organisational Collaboration were more readily identifiable. In the CD case the existing relationship between CD and HD meant that the commercial negotiations were based on CD and BW forming a bipartisan agreement on how to monetise and share the benefits made available from the newly created capability. In the MT case, the formation of the commercial agreement was a much more involved process as the tripartite agreement required extensive negotiation. The negotiation of a commercial agreement between BW, MT and MK enabled the early phases of the Extra-Organisational
Collaboration Process: motivation; enlistment; mediation and synchronisation; and sharing to be identifiable as defined stages of the collaborative process. Prior to this case, little attention had been paid to the importance of establishment of a clearly defined relationship between the collaborative parties. The focus had primarily been centred on the development of the value rather than the structure under which the value and the relationship would be established.

4.3.7 Conclusion

The MT case is a good example of Extra-Organisational Collaboration made possible by the shared desire to deliver new value to the end customers of MT to satisfy a need that a certain segment of the customer base had openly expressed an interest in. As Drucker (2002) points out, innovations tend to arise from a conscious and purposeful search for new opportunities. The MT case was the result of an unexpected occurrence based on new knowledge that the product manager was willing to share with the leaders at BW.

The process was well managed by the collaboration coordinator. Their skill operating in and background knowledge of large organisations allowed them to be more considerate of the cultural and bureaucratic nature of large firms. This skill allowed them the ability to keep all the participating collaborators fixed on the shared value that was being created.

As the opportunity was commercialised and product growth stalled, the inability of the smaller firms to engage with the product management team at MT as that achieved during the collaborative effort resulted in the eventual abandoning of the product offering. The lack of market power and the low level of direct customer engagement held by BW and MK meant that their sphere of influence within MT declined as the decision making moved further away from the original collaborators.
4.4 The CC Case Study

4.4.1 Introduction of the CC Case

The organisations directly involved in the CC Case include BW, CC and SLS. The three organisations collaborated to create a reporting tool on a mobile application that would allow lifesavers to report incidents on the beaches within their patrol zone, such as rescues, occurrences of rips and other dangerous events. The lifesavers could take a photo of the incident and input key environmental data to help with the predictive analysis that targeted improved beach safety.

BW CEO and the author had a personal relationship with the head of CC dating back to a relationship when the three individuals were at other firms that were involved in a commercial relationship. The head of CC had been the founder of CW.com.au and had contracted BW to provide several information services to the community of CW.com users. When private investors bought into CW and added other investments in media under the CW banner, the previous CEO of CW.com moved over to head up the R&D arm of CW, CC. BW continued to provide services to CW and the relationship remained operational through the previous CEO.

4.4.2 Overview of Case Organisations in the CC Case

4.4.2.1 CC

CC is an Australian provider of hosted, managed services delivering a total solution for specialized video content analytics and environmental monitoring via public and private cloud architectures. Since 2009, they have delivered sensors correlated to video via Milestone’s XProtect functionality and a global Partner Network to a growing list of
government and private customers in Australia and the USA. From single site single cameras, all the way up to large geographically distributed, complex internetworked surveillance challenges – they provide virtualized video analytics software solutions”. CC is a subsidiary of CW (established in 1998) which provides Australia’s coastal community with live camera vision, daily surf reports and forecasts and news and features from around the country’s coast. CW has grown into the Australia’s most comprehensive coastal reference site. Using CC’s camera network and working with some of the country’s pre-eminent coastal scientists our monitoring arm, CC, provides vital real-time data on beach erosion, risk and surf quality for councils and governments, lifeguards and rescue services.

4.4.2.2 SLS

SLS is the peak beach safety and rescue authority and is one of the largest volunteer based community service organisations in Australia. SLS operates throughout the region and manages 59 surf lifesaving clubs with 36,000 dedicated individuals. SLS exists to save lives, develop practices in education, prevention, emergency care and rescue, and ultimately to meet a vision of ‘Zero preventable deaths in Queensland waters’.

4.4.2.3 BW

BW while formed in 2002 to commercialise previously discussed technology, by 2009 the technical capabilities of BW had expanded to provide a range of applications environments. In this case, the opportunity was intended to exploit BW’ broader capabilities in mobile application development.

4.4.3 Analysis of the CC Value Creation Opportunity

The SLS organisation was a customer of CC. SLS used CC network of beach cameras to help manage the beach safety programs. In a meeting between the CC and SLS, it was identified
that three issues were coalescing into a significant management issue for lifesaving clubs around the world. The first of these issues was the amount of paperwork that volunteer organisations were expected to manage in relation to beach safety incidents. In fact, the local clubs had employed a resource just to enter the manual forms into a data base. The second issue was the ability to link lifesaver observations with the large volume of automated data being generated by groups like CC. And finally, the third issue that the lifesaving clubs faced was the ability to introduce more predictive beach staffing in response to changes in environmental conditions, e.g., changing weather or increased beach patronage. During this conversation, it was suggested that a mobile application targeting lifesavers would be a significant help in managing these issues.

4.4.4 Description of the Process of Value Creation using Extra-Organisational Collaboration

The following section of the case describes the process followed by the participants in the creation of value in the CC case. The section will be described in accordance with the model of extra-organisational collaboration described in Chapter 2. The analysis will begin with the Awareness stage in the process and end at the Reflection stage of the process.

Awareness

During the planning phases for an international conference on Lifesaving in 2009, SLS and CC management identified an opportunity to develop a mobile application that would assist the management of beach safety by improving the way beach incident report data was gathered and enhanced the predictive nature of beach safety management. CC suggested that one of their partner companies, BW, may be able to assist with the development of this capability. BW and CW (CC) parent company had an extensive relationship with BW providing the infrastructure in which mobile messages were delivered to the CW subscriber
base. CC management organised a meeting between SLS, CC and BW to discuss the opportunity to improve beach safety.

CW and CC maintained an extensive relationship with SLS as the two firms were collaborating on the development of an extensive network of beach surveillance technologies. While SLS utilised the services provided by CC, their relationship operated on a customer–supplier basis. Consequently, any new value created by the partners in this Extra-Organisational Collaboration would require CC to develop the market for the offering across lifesaving organisations and government clients.

**Motivation**

The motivations of the participating parties initially centred on the need to find a solution to the problems SLS and CC had identified in relation to collecting data from lifesavers in the field. SLS’s primary motivation was focused on introducing efficiencies at club level where resources were scarce and managing manual administration tasks always seemed to be prioritised lower than other less critical tasks.

CC was an organisation whose prime purpose at the time was conducting research, and they operated a very extensive infrastructure of beach cameras and data analytics capability for monitoring environmental conditions, beach patronage, and the impacts of society on the natural beach environment. The opportunity to enhance this data with human observation presented a strong motivator for the management at CC. While they explicitly mentioned the opportunity to commercialise the mobile application and its outputs, at the time of the case commercialising technology was not central to their mission or culture.

BW had been providing a range of mobile applications to CW. However, the technology environment in which BW operated was changing, as the arrival of Smartphones and mobile broadband services enabled a much-improved offering for customers. BW had built an
operating platform based on second generation voice over internet protocol and mobile technologies such as Short Message Service (SMS) and GSM Packet Radio System (GPRS). The introduction of Smartphones and third generation mobile data capability enabled phone based applications to provide a much-improved operational capability. The opportunity to develop a deeper understanding of the new technology environment and to develop a future product platform was very interesting to BW and was a prime motivator for BW commence the Extra-Organisational Collaboration.

Enlistment

The enlistment process occurred over a series of discussions to assess the interest and level of true opportunity that existed in the value creation project that was proposed. SLS assumed the role of customer, even though the value creation would be sold to the individual surf lifesaving clubs and not just the state bodies.

The process of enlistment also required significant engagement with CC parent company as the initiative was not on the organisation’s planned program of work and required significant seed funding. CC applied for a range of government funding support from the Australian Federal Governments Cooperative Research Centre Program. In addition, CC secured additional funding for the project from the Queensland State Government. CW also provided a commitment to cover the cost of any development work required to produce the new value that would generate unique intellectual property for CC. The process of securing the seed funding was managed internally within CC and was achieved with a minimal delay to the collaborative endeavour commencing. The decision was made for CC to assign a collaboration coordinator and one of their in-house scientists was given the responsibility.

The nature of the value being created was closely aligned with the other services being provided by CW.com and the management of CW.com wanted greater control of the project.
The principle investor in CW.com had identified the work as a core opportunity for CW.com in the US market.

**Mediation and Synchronisation**

The process of mediation and synchronisation was a quite involved process. As the team was creating new intellectual property from a zero baseline, a few legal and financial issues needed to be resolved. Principal amongst these were the commercialisation rights that each of the various contributing parties would be able to access. The mediation process required extensive negotiations which were at the centre of several go/no go conversations. These issues were resolved by establishing a legal framework that enabled all the parties to participate with a clear understanding of the rights and obligations of each of the parties, most crucially what role and rights each party had to any future commercial value that would be explored.

The development of the agreement also enabled CC and BW to define the operations of the commercial elements of the agreement. Developing an understanding of the cost of the existing manual processes within the lifesaving clubs allowed BW and CC to scope out the size of the market and build a commercial model that provided financial and resource efficiency benefits to the clubs and enabled both organisations to build a financial basis for their value. The agreement also provided BW with the opportunity to exploit the new capability and intellectual property in other non-beach related markets. The development of tools that could generate user content in organisations characterised by mobile and remote operations presented a significant opportunity for BW with its other clients operating in the health, insurance and childcare sectors. CW.com and the subsidiary business CC had a strategic focus on beach and waterway monitoring and management and had no strategic interest in entering the other markets in which BW operated.
Sharing

Following the establishment of an agreed legal and commercial position BW, CC and SLS came together for a series of sharing workshops where the details of the opportunity were unpacked and an agreed end state of the collaboration was identified. This process allowed the technical and functional experts in the three organisations (customer, customer firm and supplier firm) to form a shared view on what success would look like. This process included agreement to build a prototype that could be demonstrated in the field at the upcoming international lifesaving conference. The sharing process enabled the parties working in the collaborative endeavour to build trust in each party’s strengths and weaknesses. The sharing process also enable the identification of extensions of the value to be created that could be outworked in further collaborative exercises.

Defining and Creating

The detailed definition, design and development of the solution which incorporated remote field based data collection utilising a mobile device, the necessary data schemas, process flows, detailed user experiences and testing processes were all created in a collaborative manner using an iterative design and build process. The software development process utilised a rapid prototyping model, which involved BW creating a series of prototypes which were presented to the other partners and improvements and additional functionality identified. The program development underwent a series of these iterative stages. Isensee and Rudd (1966) define the Rapid Prototyping process as a method for developing concepts and testing them with users and experts. The process is particularly useful in clarifying and defining requirements.

During this process, the first challenge for the collaboration coordinator surfaced. A dispute arose as to who would purchase and own the 5 mobile devices required for the field trial. As
the purchase of hardware was not specified in the grant money from the state government, funding was provided by the management of BW to keep the collaborative endeavours on track. The finance manager at CW claimed that any hardware for the development of the pilot was their responsibility and saw this as a breach of the legal agreement, and instructed the CC team to stop work on the project. Extensive time was lost negotiating and facilitating a resolution to this issue and managing conflict. The finance manager at CC was also source of another dispute between the participating parties by delaying the reimbursement of costs as per the agreement. The issue required escalation to the owners of CW, thereby causing further delay and damaging the trust between the management of both organisations. At the root cause of these issues was a lack of trust between the finance manager and the scientist at CC. The inability to resolve their differences created difficulties for the final success of the project.

The prototype was built and successfully demonstrated at the international lifesaving conference and generated significant interest. Unfortunately, the participating parties had not established a clear framework for commercialising the product and interest stalled when the first order could not be fulfilled. As the firms entered the process of reflection, the failure to realise both the direct and indirect benefits of the collaborative exercise impacted the desire for these firms to work together on other new value opportunities.

Reflection

At an operational level the collaborative exercise was regarded as a success by groups participating in the value creation. Unfortunately, from an overall perspective, this instance of Extra-Organisational Collaboration was not successful as the process failed to create new business value for either CC or BW and no customers could benefit from the new value created. None of the participating parties could extract the direct and indirect benefits that
motivated them to originally initiate the value creation process. The benefits of the collaboration could be separated into two classes of benefits direct and indirect. The direct benefits of the collaboration were the reduced transaction costs incurred by the club and the establishment of a new revenue stream for both CC and BW. However, no direct benefits were achieved by either party. The indirect benefits of the collaboration included the establishment of relationship between CC and BW, at an operational and professional level in the two organisations a strong level of trust was developed between the technical staff of the respective organisations. Unfortunately, at a management level, trust in the relationship between CW and BW suffered from the differing perspectives of the respective executives. However, it should be mentioned that the level of trust between CC management and that of BW remained strong throughout the collaborative endeavours.

4.4.5 Outcomes of the Value Creation Process

The Extra-Organisational Collaboration Process employed here by BW, in conjunction with CC and SLS in this instance, successfully delivered a basis for new business value. A breakdown in the relationship between CW and BW and in the execution of the customer engagement process in the sales cycle meant that the new value could not be monetised with customers. The process engaged a representative for the target customer in the process. However, their ability to influence the end-user community was insufficient to drive customer interest in the end-product.

The strong involvement of the operational teams of the three participating parties in designing and creating the end-product meant that the collaborative effort received a high level of engagement and commitment to the relationship. The role of the collaboration coordinator was a major contributor to failure of this collaborative endeavour to deliver the new value it envisioned. During the collaborative process, the coordinator kept the team on
task. However, they managed their own internal organisational conflict poorly which contributed to the failure of the collaborative endeavour to build new business value.

The ability of the participating team members to advance the outcomes of the collaborative endeavour motivated these team members to work collaboratively on future projects. Unfortunately, the damage to the relationships at the CW level within the organisation meant that future development on this and other shared initiatives were not pursued.

4.3.6 Contribution to the Theory of Extra-Organisational Collaboration

The CC case identified the role of collaboration coordinator and provided additional insight into the importance of this role. The CC case also provided significant insight into the importance of creating a clear path to monetising the value created. A lack of clear direction about how the value would be monetised past the development of the prototype would have reduced the risk to the supplier firms.

Another important factor identified was the risks associated with having parties without either delivery or financial accountability driving the motivation stage of the collaborative endeavours. This case highlighted the difficulties that arise when one firm does not assume a level of accountability for the success of the collaboration. A lack of accountability, combined with the lack of a clear path to a final customer value, meant that the motivations beyond the prototyping exercise were disguised or that assumptions on the intent of the customer firm made by the supplier firm created an opportunity for the perception of the loss by the supplier firm to be significantly increased. This case demonstrated to the author that building a proper motivational framework requires a much greater focus of all the participants the Extra-Organisational Collaboration. The introduction of new participants into the collaborative partnership needs to be well managed to ensure a clear understanding of the desired outcomes is well defined and articulated.
4.4.7 Conclusion

The CC case is an example of Extra-Organisational Collaboration that failed to deliver the new business value outcomes despite the willingness of the collaborative team to work closely together to create the new value. Support, trust and engagement is essential across all levels of the participating organisation if the outcomes of an extra-organisational collaboration are to be successfully delivered. Without an intrinsic level of trust across all levels in the participating firms, the opportunity to convert the value created into something the client will purchase is placed at significant risk. Todeva and Knoke (2005) argue that success of partnering between firms is much less influenced by the internalised costs and benefits of the collaboration than by the history of partnering and trust that exists between the firms. In the CC case, the introduction of a new finance manager into the relationship caused a breakdown in trust and ultimately lead to the failure of the project. New participants or stakeholders in the Extra-Organisational Collaboration Model have the potential to derail or impact the harmony that operates within the collaborative program. The collaboration coordinator and the key managers overseeing the collaborative process need to ensure that new participants or stakeholders are inducted into the program and ensure alignment of these new participants with the intentions of the Extra-Organisational Collaboration purpose.

The inability of the collaboration coordinator to engender and maintain a significant commitment from the parent company impacted the project significantly. According to Dhanaraj and Parkhe (2006), a collaborative partnership that is dysfunctional is not conducive to value creation. They argue that a critical task at the hub of a collaboration exercise is for the firms to maintain and promote stability. In this instance the entire value creation exercise was framed as an exercise in extra-organisational collaboration, but the isolation of the collaboration coordinator by the finance manager created project instability and impacted trust significantly.
4.5 The Cases Compared

The research proposal looked to answer several questions relating to the creation of business value. First and foremost, how does Extra-Organisational Collaboration, a form of business networking, enable the creation of value to happen in an effective and efficient manner? Analysis of the three cases centre on three separate value creation exercises undertaken by BW in conjunction with a range of business partners and customers or their representatives.

The following table identifies the roles and capabilities that each participant in the Extra-Organisational Collaboration cases described above bought to the value creation exercise.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Role</th>
<th>Contribution to Value Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>Customer Firm</td>
<td>Provided software application (SHIP) to medical clinics that was enhanced to improve patient interaction.</td>
</tr>
<tr>
<td>BW</td>
<td>Supplier Firm</td>
<td>Provided access to secure messaging technology which improved the patient-doctor interaction</td>
</tr>
<tr>
<td>HD</td>
<td>Customer</td>
<td>Used CD SHIP application to run their patient management processes</td>
</tr>
<tr>
<td>MT Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td>Customer firm</td>
<td>Provided a range of mobile services to end user customers in the Malaysian Telekom market</td>
</tr>
<tr>
<td>BW</td>
<td>Supplier Firm</td>
<td>Provided a turnkey software solution based on its secure messaging technology to enable the MT Private Messaging Gateway</td>
</tr>
<tr>
<td>MK</td>
<td>Supplier Firm</td>
<td>Provided IT infrastructure services to ensure MT</td>
</tr>
</tbody>
</table>
customer data was managed with the Malaysian territory.

**Table 4.1 Comparison of the Case Study Participants (Developed for this research)**

<table>
<thead>
<tr>
<th>Case</th>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>Customer Firm</td>
<td>Provides a range of data and data analytics to SurfLife Saving Clubs around the world</td>
</tr>
<tr>
<td>CW</td>
<td>Supplier Firm</td>
<td>Provided funding for the value creation exercise and some technical expertise creating the user portal</td>
</tr>
<tr>
<td>BW</td>
<td>Supplier Firm</td>
<td>Provided the technical know how to build a mobile application to enable the remote recording of the data, also built the communications platform to enable the collection of data from the remote mobile devices</td>
</tr>
<tr>
<td>SLS</td>
<td>Customer Representative</td>
<td>Provided insight into the operations of the 59 clubs operating under their banner</td>
</tr>
</tbody>
</table>

All cases could be described as exercises in co-creation. However, only in the CD case was the customer actively involved in the value creation exercise. In the MT case, the customer insight was provided from MT based on their customer research activities. In the CC case, the insight was provided by an organisation representing the lifesaving clubs. In the CD case, the participants could actively engage with the customers during the Sharing phase of the project. This direct engagement enabled the customer priorities and required user experience outcomes to be more clearly articulated and worked into the design and create phase of the value creation exercise. In the case of the other projects, the value creation exercises relied on the interpretation of the customer priorities and end user experience outcomes by senior managers or stakeholders in the customer organisations. The engagement of the customers
and their representatives in the process was consistent with the concept of co-creation espoused by Ramaswamy and Gouillart (2010), whereby the creation of value responds to insight arising from the actual engagement experiences of people. In the case of CC, some questions arise as to whether the position represented by SLS represented the priority issues for lifesaving clubs. This is because although the clubs showed a genuine interest in the ability to collect data electronically in the field, they showed little motivation or capacity to invest in the product created.

Another major collaborative element that was critical to the case was the ability of the network partners to execute their capabilities to enable the creation of the value proposition proposed. In the three cases discussed, the technical elements of the value creation exercises were successfully delivered by the range of partners involved across all three case studies. The success of the Create phases in delivering the value outcomes sought was a consequence of three actions. The first action was the quality of the Sharing phase of the process. Bringing the participating members of the collaboration together to clearly articulate a shared vision of the end state value opportunity enabled the creation of a shared purpose amongst the value creation team. Put simply, a shared purpose describes what everyone in the team is trying to do. This will guide effort at all levels and provide everyone with what they need to contribute and to do a good job (Adler, Heckscher and Prusak, 2011).

The second action was a result of participants with key expertise being prepared to share their knowledge openly without any intent to hoard ideas or create confusion. In all three cases, the parties’ willingness to share information about intellectual property enabled other technical experts to understand how that knowledge could be adapted to their own technical capability.

The third action that enabled the successful creation of value was the willingness of the parties to share the end state intellectual property and the value that was created from the
collaborative process. In the CD and MT cases, the explicit broad based (either geographically or by market within a geography) licensing of the BW patents meant that these firms could grow the value on a much wider scale. In the case of CC, the intellectual property was created anew and, at an operational level, the participants were prepared to explore opportunities beyond the initial creative process. A key element that underpins this willingness to work together is the level of trust that exists between the participating firms, or more importantly the participating actors that represent the firms.

The substantial risk for potential loss or failure, either perceived or real, that exists in interfirm collaboration and transactional relationships introduces a strong need for relationships that built up from a position of trust. Adobor (2005) argues that trust in these types of business relationships exists to ensure the participating parties that no party will attempt to exploit the other participating parties. “Trust, even between firms, is in reality trust between people. However, in their role as organisational members, individual managers often engage in behaviours, including trusting, on behalf of the organisation” according to Adobor (2005, p331). Parkhe (1998, p220) suggest that these risks are substantially reduced by trust as “trust reduces complexity and uncertainty far more quickly and economically than prediction, authority or bargaining.” According to Parkhe (1998) trust plays a key role in overcoming uncertainty, vulnerability and the need for control. In each of the cases the level of trust between the participating parties can be seen as moderating function on how well the parties engaged in the Extra-Organisational Collaboration particularly in the stages of the process post partner enlistment.

The role of the collaboration coordinator was also a critical factor that contributed to the successful creation of value in each of these cases of Extra-Organisational Collaboration. In all three cases, the role of coordinator was clearly identified and articulated to the
collaborative partners. While each organisation most likely had their value creation lead or ‘project manager’, the role of the collaboration coordinator was to bring the participating members of the collaboration together to agree on the shared outcomes and then to continually reference the group back to that proposed outcome. The establishment of the coordinator roles in every case ensured a consistent interpretation of the shared outcome vision, as this role provided a reference point for others in the collaborative network to create against.

4.5.1 The Emergence of the “Hub” Firm

In all three cases, the coordinators were identified from within what Dhanaraj and Parkhe (2006, p665) call the “hub firm”, which were the firms that played the pivotal role in formation, operationalisation or technical know-how behind the value created. In the CD and MT cases, BW played a central role in forming the collaborative partnership and providing the base technology around which the value was created. In the CC case, the CC team played this central role of bringing the partners together and providing the core technology capability, the beach surveillance camera network, weather stations and data dam around which the new value would be created. The evidence from the cases suggest that the existence of the central firm that champions the case for the value creation exercise is a critical element of success. Gilly, Talbot and Zuliani (2011) recognised a new form of organisation which had the characteristics of a hub firm. The hub firm as described by Gilly, Talbot and Zuliani (2011, p2010) have the common characteristics of “being able to develop linked organisational proximities” that “coordinate industrial and scientific partners to help them to conceive and master sets of skills” and capabilities. These hub firms possess a specific set of technical or customer skills and the ability to form and relationships with other firms and actors who have other skills, resources and abilities critical to the process of co-creation.
Saito (2013) recognised that many social and economic networks, including inter-firm networks possess characteristics of that connect the firms around a hub firm. Saito (2013) also suggest that hub firm plays a critical role in bringing together collaborative participants with both direct and indirect relationships. This emerging form of an organisation creates a focal point from which a collaborative co-creation is generated. The nature and role of the hub firm requires further research to better understand the dynamics of this firm based role within the network to determine if the strength of the championing of the opportunity is a function of the individuals leading the firms or the culture of the firm itself.

The final area of comparison is a view of how each case managed the process of Extra-Organisational Collaboration. The following table provides a summary of these approaches.

<table>
<thead>
<tr>
<th>Extra-organisational Process Stage</th>
<th>Principles of the Model</th>
<th>CD</th>
<th>MT</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness</strong></td>
<td>- Opportunity identification</td>
<td>- Outcome of discussion between partners</td>
<td>- Outcome of discussion between BW and MT</td>
<td>- Opportunity identified by CC in conversation with users</td>
</tr>
<tr>
<td></td>
<td>- Champion Identified</td>
<td>- BW lead the discussion</td>
<td>- BW lead the discussion</td>
<td>- CC approached BW and presented opportunity</td>
</tr>
<tr>
<td></td>
<td>- Searching for partners</td>
<td>- Partners became self-evident</td>
<td>- Partners required recruiting</td>
<td></td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>- Promoting the opportunity</td>
<td>- All coalesced around the opportunity to use BW technology to improve patient outcome</td>
<td>- Identified opportunity to solve customer experience issue presented by MT</td>
<td>- CC and SurfLife Saving saw this as an opportunity to solve club problems</td>
</tr>
<tr>
<td></td>
<td>- Defining the value</td>
<td></td>
<td>- Opportunity to build new product offering for MT</td>
<td>- BW saw this as an opportunity to extend technical capabilities</td>
</tr>
<tr>
<td></td>
<td>- Selling the benefits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enlistment</strong></td>
<td>- Choosing best partners</td>
<td>- Original conceivers of the opportunity had the skills to execute</td>
<td>- Needed to recruit partner to provide infrastructure in Malaysia</td>
<td>- Partnership formed around members of an existing network who had the skills to execute</td>
</tr>
<tr>
<td></td>
<td>- Gaining commitment</td>
<td>- All could see the value in the opportunity</td>
<td>- Value opportunity identified</td>
<td></td>
</tr>
</tbody>
</table>
### Mediation and Synchronisation
- Gaining agreement on how value will be shared
- Protecting the IP of participants
- Establishing governance
- Established a formal agreement between CD and BW
- IP protected in agreement
- Governance described in agreement
- Established a formal agreement between MT and BW
- Agreement existed between MK and BW
- IP protected in agreement
- Governance described in agreement
- Established a formal agreement between CC and BW
- IP ownership agreed
- Governance described in agreement
- No agreement struck with SLS

### Sharing
- Build shared vision of outcome
- Define the process to create value
- Lock in the roles of participants
- Conducted workshops to establish view of the outcome
- Decision to use SPRINT as the methodology
- Team roles defined
- Conducted workshops to establish view of the outcome
- Required to use an adapted waterfall methodology to meet needs of MT
- Team roles defined
- Conducted workshops to establish view of the outcome
- Decision to use SPRINT and Prototyping as the methodology
- Team roles defined

### Defining and Creating
- Detailed outcome design
- Creation of the value offer
- Promoting to the customers
- Designed the solution
- Built the solution
- Worked closely with customer to promote to other customers of CD
- Designed the solution
- Built the solution
- MT launched specific product campaigns to attract customers
- Designed the solution
- Built the Prototype
- Conflict over funding arose with CW
- Customer engagement not strong

### Reflection
- Review benefits delivered
- What was learned from the process
- What opportunities exist for future collaboration
- Immediate benefits delivered
- Ongoing business relationship between BW and Cara Data
- Immediate benefits delivered
- Relationship survived while product offered in market
- Prototype delivered
- Ongoing business relationship between BW and CW weakened
- No customer outcomes delivered

<table>
<thead>
<tr>
<th>Mediation and Synchronisation</th>
<th>Sharing</th>
<th>Defining and Creating</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaining agreement on how value will be shared</td>
<td>Conducted workshops to establish view of the outcome</td>
<td>Designed the solution</td>
<td>Review benefits delivered</td>
</tr>
<tr>
<td>Protecting the IP of participants</td>
<td>Decision to use SPRINT as the methodology</td>
<td>Built the solution</td>
<td>What was learned from the process</td>
</tr>
<tr>
<td>Establishing governance</td>
<td>Team roles defined</td>
<td>Worked closely with customer to promote to other customers of CD</td>
<td>What opportunities exist for future collaboration</td>
</tr>
<tr>
<td>Established a formal agreement between CD and BW</td>
<td>Conducted workshops to establish view of the outcome</td>
<td>Designed the solution</td>
<td>Immediate benefits delivered</td>
</tr>
<tr>
<td>IP protected in agreement</td>
<td>Required to use an adapted waterfall methodology to meet needs of MT</td>
<td>Built the solution</td>
<td>Ongoing business relationship between BW and CW</td>
</tr>
<tr>
<td>Governance described in agreement</td>
<td>Team roles defined</td>
<td>MT launched specific product campaigns to attract customers</td>
<td>Relationship survived while product offered in market</td>
</tr>
<tr>
<td>Established a formal agreement between MT and BW</td>
<td>Designed the solution</td>
<td>Designed the solution</td>
<td>Prototype delivered</td>
</tr>
<tr>
<td>Agreement existed between MK and BW</td>
<td>Built the solution</td>
<td>Built the Prototype</td>
<td>Ongoing business relationship between BW and CW</td>
</tr>
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</tr>
<tr>
<td>No agreement struck with SLS</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 4.2 Comparison of Case Activity against the framework of the Extra-Organisational Collaboration Model

All three cases presented followed the framework for engaging in collaboration outlined in the Extra-Organisational Collaboration model. The engagement in all three cases were examples of value creation developed because of one or more parties identifying an
opportunity or problem against which the new value could be created. The three cases went through a process of motivating the participating partners to consider the value creation opportunity as a valid opportunity. In the CC case, there was not the same level of alignment around the motivations as there was in the other two cases. However, this did not appear to have a subsequent effect on the creation of the new value. The impact of this difference in motivations appeared to impact the ability to convert the value created into customer sales. The engagement with lifesaving clubs through SLS may have also been a contributing factor.

In all cases, the enlistment process involved reaching out to firms within either the formal commercial network of the championing firm, or to the more informal business network of leaders in the championing firm.

In all cases, a formal legal framework was established between the commercial entities involved in the value creation process. These legal frameworks all covered the aspects of value sharing, ownership and protection of intellectual property and the governance model that would sit around the relationships both during the creation of the value and once the value was operationalised. In the CC case, while the establishment of the agreement between the CC management and BW identified a process for managing disputes and conflict, this process was not adhered to. This ultimately caused difficulties during value creation process. This failure arose as the management at CC demonstrated a reluctance to engage the bureaucracy at CW in the process of forming the legal framework. This reluctance created the basis for conflict and dispute when the corporate team at CW became aware of the how the intellectual property being created would be shared. In the long run this conflict damaged the trust in the supplier-customer relationship BW had with CW. Conversely, in the MT case, engaging the bureaucracy in the establishment of the collaborative endeavour enabled the value creation process to proceed with minimal conflict or dispute.
In all three cases, a similar process for developing a shared vision for the collaboration that clearly articulated the value being created, which provided a strong foundation for the ‘define and create’ phases of the value creation exercises. The realisation of benefits in all three instances was different and the reason for this can be traced back to two factors: (i) the level of customer engagement in the creation process; and (ii) the level of ownership of the value creation exercise at senior levels across all participants.

Customer engagement in the value creation process can take a number of forms and in the three cases different levels of engagement were observed. Piller, Ihl and Vossen (2011, p38) identified three different modes for using and generating customer input into new value creation “(i) ‘Listen into’ the customer domain, (2) ‘ask’ customers and (3) ‘build’ with customers”. Customer participation in the collaboration process will differ based on firstly, the level of uniqueness each customer enjoys within a product or service offering or secondly, the level of engagement with the product, service or experience of customers in the broader customer community.

In the CD case, an end customer was an active participant in the value creation exercise, in essence the customer participated in the ‘build’ and the senior managers of the participating firms were committed to the opportunity. Subsequently, both direct and indirect benefits were realised and the value creation was the basis for a long-term business partnership. As a contrast, the level of engagement by end customers and senior corporate management in the CC case was significantly below that of the other two cases and consequently even though the value creation outcome produced a working prototype, there was little motivation or support to commercialise the prototype and extract business value from the process. In the CC case, while the management of the directly collaborating firms were highly engaged in the process, the CW management, while agreeing with the opportunity, were less engaged in the process. Likewise, whilst the customer was ‘asked’ about the product by the collaborating
team, their true level of engagement was low. While there was no direct customer involvement in the MT case, MT team members acted as proxies for the customer due to their knowledge and experience with the market. The management of MT was committed to the value creation exercise and their key product managers had access to the critical customer insight that enabled the project to be a success and deliver a range of strong direct benefit.

4.6 Summary

This chapter presented the case study material that formed the basis of the analysis of the Extra-Organisational Collaboration process and its role in the creation of new business model. The chapter discussed the role of the collaboration coordinator and identified a new concept of the champion organisation or hub firm. The firm who takes on the role of champion becomes the driving force in bringing the collaborative team together by sharing their motivations and engaging others to participate in the process. The cases also provided evidence to support the existence of the seven phases of the Extra-Organisational Collaboration process which are: Awareness; Motivation; Enlistment; Mediation and Synchronisation; Sharing; Defining and Creating; and Reflection. The following chapter, Chapter 5, will discuss the conclusions and implications of the research project.
CHAPTER 5

CONCLUSIONS AND IMPLICATIONS
Chapter 5 – Conclusions and Implications

5.1 Introduction

This research focused, discussed and attempted to address the issues relating to the research problem, the role of Extra-Organisational Collaboration in the creation of new business value, as presented in Section 2.7 of this thesis. In attempting to frame the problem, the researcher subsequently presented a model for Extra-Organisational Collaboration and how the process sitting behind this model influenced the creation of new business value. The sequence is detailed in the following chapter.

Chapter 1 discussed the background of this research and outlined a plan to arrive at the solution. The chapter discussed the outline of the research issues, the justification for the research, the definitions and any limitations that might restrict the findings of the research.

Chapter 2 highlighted the findings of the literature review, and provides a brief window into the parent disciplines which informed the creation of the model. Section 2.2 discussed the justification for the research, which highlights the role value creation has in prolonging the life of a firm and ensuring its relevance in a dynamic market. Section 2.3 examined the parent discipline of the theory of the firm and explores how the changing dual dynamic of technology and globalism have necessitated a greater focus on specialisation and partnering as opposed to the traditional approach of backwards and forwards vertical integration.

Section 2.4 presented the parent discipline of value creation and explored the evolution of value creation. This evolution extended from process innovation to support the more efficient supply of commodities to value innovation around the enhancement to the overarching customer experience including the delivery of products and services. Section 2.5 introduced the parent discipline of customer co-creation and the role that customers now play in the process of informing new value creation opportunities. The section discussed the rise of the
prosumer and the changing dynamic between buyers and sellers. Section 2.6 presented the parent discipline of business collaboration and discussed the greater reliance on business networks as sources of innovation, access to specialisation and value innovation. Section 2.7 introduced the theoretical model of Extra-Organisational Collaboration and describes the roles of the champion organisation and collaboration coordinator. The section also presented the collaborative process underlying the model and describes the detail in each phase of the process.

Chapter 3 presented the research methodology that was employed in the research and discusses the benefits and limitations of using a case study approach to explore three cases where the Extra-Organisational Collaborative process was employed in the assessment of the model’s logic. The chapter also discussed the importance of the interpretive approach in defining new theoretical concepts within the discipline of business research.

Chapter 4 presented the framework against which the detailed case study narratives will be presented. Sections 4.2, 4.3 and 4.4 presented the CD, MT and CC cases respectively. Section 4.5 conducted a comparison of the cases and identified areas of the cases that support the Extra-Organisational Collaboration model and areas of the cases where conflicting evidence would highlight opportunities for additional analysis.

Chapter 5 discusses the outcomes of the research and examines the implications for theory and practice. The chapter also examines the opportunities for further research.

5.2 Structure of Chapter 5

This chapter is divided into 9 sections. After an introduction, Section 5.1, the chapter discusses the conclusions reached in relation to the research propositions stated in Section 5.3. Section 5.4 looks at the conclusions that arise by examining the research questions individually. The implications for theory and for practice are discussed in Sections 5.5 and
In Section 5.7 the limitations with the research are discussed and in Section 5.8 the implications for future research are discussed. A summary of Chapter 5 will be presented in Section 5.9.

**5.3 Conclusions about research propositions**

The research proposed that a greater understanding of inter-firm relationships and business networking and how these contribute to the successful creation of new business value is an important contribution to the body of knowledge. The literature review identified that the nature of customer relationships is changing, with consumers seeking to make a greater contribution to the creation of new products and services. The review highlighted the impact of technology complexity, innovation and disruption, and the rapid globalisation of markets is having on the firm’s ability to vertically integrate. The limiting of vertical integration requires firms to build a greater capability to collaborate.

Collaboration allows firms to gain access to the necessary skills and capabilities to deliver against a greater depth of customer expectation. Dyer and Singh (1998, p661) suggest that a firm’s critical resources “may span firm boundaries and may be embedded in inter-firm routines and processes” and argue that the growth in collaboration suggest that the inter-firm relationships are an increasingly important economic environment requiring further analysis. Within the S-D logic proposed by Vargo and Lusch (2008) point out that value creation occurs within a value configuration of economic and social actors interacting and exchanging across and through the network. McColl-Kennedy et al (2012) suggest that the benefits realised from co-creation arise from the combination skills and interactions participants in a multi-actor value network. Developing a deeper understanding about the processes and capabilities required to be successful in the inter-connected world is an important requirement.
for businesses and academics. The ability to build successful collaborative capabilities to enable co-creation will increasingly become a source of competitive advantage.

Traditionally, large firms formed collaborative arrangements through a range of instruments such as outsourcing, joint ventures, equity investments and contract manufacturing. These collaborative endeavours largely arose because of firms attempting to reduce their transaction costs as a prime response to competitive pressure. These initial endeavours in inter-firm partnering were focused on building strategic partnerships within the traditional supply chain relationships which were grounded in the drive for greater efficiency and effectiveness or in endeavour to gain access to greater learning and knowledge. Gulati, Nohria and Zaheer (2000, p204) support this view of developing strategic collaborative relationships when they suggest that “changes in industry include fewer suppliers, longer-term relationships and greater involvement in the design process, significantly improved the performance” of large manufacturing firms like automakers. The ownership structures, embedded bureaucracy and governance and complex legal nature of the collaborative endeavour tended to limit these types of collaborative endeavours to large firms with access to large amounts of capital and resources.

As capabilities underpinning product and service development have become more complex and technology dependent, firms have become increasingly specialised and created a need for greater focus and concentration on developing areas of competitive advantage. With much of this specialist capability being invested in smaller and medium sized enterprises, the need for customer firms and supplier firms to cooperate has become a critical success factor. Walter, Ritter and Gemunden (2001) suggest that the process of value creation can be regarded as the raison d’etre of collaborative customer-supplier relationships (. Brass et al, (2004) argued that firms with strong inter-organisational collaboration were able to access greater innovation and performance benefits and enhanced the firm’s chances of survival in competitive
markets. Madhavaram and Hunt (2008) state that the S-D logic approach requires a firm to put the ability to build collaborative networks that support co-creation are core to the firm’s competitive advantage and business performance.

S-D logic’s influence on the evolving nature of inter-firm collaboration has been the rapid growth in consumer involvement in the creation of new value. The need for supplier firms to access the insight generated by customer firms as they interact with customers has made greater collaboration necessary. Consumer-firm co-creation has enhanced competitive advantage and provided access to new sources of value delivered to firms. The advent of the producer-consumer co-creation processes where customers are engaged in the process of creating new value or are in fact part of the fabric for delivering the desired consumer outcome has driven the need for greater levels of collaboration across firms which can contribute to the delivery of the customer outcome. Parasuraman (1997, p160) argues that “the advent of the “network” organisations and the anticipated increase in their numbers point to another fertile area for research: customer value delivery in the context wherein the focal companies’ ability to deliver value to its customers depends, at least to some degree, on other companies.

Ramaswamy and Gouillart (2010, p8) argue that the challenge for firms in an environment where co-creation plays a much larger role is that “managers accustomed to focusing on process efficiency and the protection of the competitive advantage in their value chain are faced with the challenge of designing new multiparty interactions and building new engagement platforms, generating new experiences for all stakeholders.” The rise in co-creation has focused manages on engaging people, employees, customers and suppliers, to collaborate to create valuable experiences while enhancing the overall value of the network. This need to deliver the new experiential value and the increasing reliance on other firms to deliver the end consumer outcome suggests a need for a greater understanding for the
dynamics and the operationalisation of the collaborative processes between customer and
supplier firms and the end customers of the value being created. In this respect, while Extra-
Organisational Collaboration is not the only process for managing value creation as the
Extra-Organisational Collaboration model proposed has been shown to be a viable alternative
for operationalising the collaborative value creation process. Adapting the model to a much
broader context requires much greater research and analysis.

5.4 Conclusions about research questions

The following table summarises how the existing body of knowledge and the contributions of
the research complement one another and combine to address the research questions posed in
this study.
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Existing Body of Knowledge</th>
<th>Contributions of this Research</th>
</tr>
</thead>
</table>
| RQ1. What drives firms to develop new business value? | ➢ Value creation is the core reason for the existence of the firm  
➢ Value creation is concerned with development of products, services and experiences to satisfy a need of customers  
➢ Value creation allows the firm to remain relevant to its customer base  
➢ Differentiate the firm from other firms competing to provide the similar offer to consumers  
➢ The role of customer experience is becoming the basis for developing competitive advantage | ➢ Research confirmed that the new business value being created served to satisfy an identified customer need  
➢ The decision to pursue the creation of customer value was based on the opportunity to create or maintain economic benefit for the involved firms  
➢ The value created in the process of extra-organisational collaboration was intended to differentiate the customer firm in the eyes of the customer and provide a competitive advantage |
| RQ2. How do customer and supplier firms currently form collaborative partnerships and relationships? | ➢ Traditionally supplier firms and customer firms engaged based on a buyer and supplier relationships. These supply chain relationships were largely driven because of reducing transaction costs  
➢ The relationships evolved as the operational environment became more complex and specialised to a series of joint ventures and strategic alliances  
➢ The development of a strategic network of firms allowed the participating companies to remove risk and search costs for goods and services  
➢ As specialisation of firms has become more concentrated and the need to build experiences has required customer firms to access a broader network of capabilities | ➢ Business and customers collaborate to create new business value not just reduce transaction costs  
➢ The business network of the leaders plays a large part in forming the core participants of the firm  
➢ The role of a central “hub firm” which facilitates the bringing together the collaborators  
➢ The creation of relationships needs the collaborative partners to formalise the relationship, enable governance and sharing of intellectual property and any benefit from the value created. |
### Research Questions

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Existing Body of Knowledge</th>
<th>Contributions of this Research</th>
</tr>
</thead>
</table>
| RQ3. What role does the extended business network of key business managers play in the identification, sourcing and establishment of extra-organisational collaborative partnerships? | ➢ Provides access to competencies and resources not available to the customer firm  
➢ Reduce the cost of creating value by reducing the cost of acquiring new capabilities  
➢ Provide greater access to information about customers and technology across the collaborative group | ➢ Provided access to knowledge about the customer groups  
➢ Provided customer firms with access to new value that differentiated their offering in the market  
➢ Broadened the scope and access to customers  
➢ Provided access to broader skills and knowledge |
| RQ4. How are successful value creation exercises coordinated within a process of Extra-Organisational Coordination? | ➢ The concept of the Hub firm was proposed, which provided a central focus point of the collaborative network  
➢ The role of the shared vision and mission was a central aspect of the success of the process.  
➢ The importance of trust and the role of existing relationships | ➢ Trust and existing relationships between the collaborative partners was important  
➢ The shared vision of the value creation exercise  
➢ The role of the collaboration coordinator in managing the process of collaboration  
➢ Support for the concept of a hub firm that provides the focus of the collaborative endeavour |
| RQ5. What are the key phases of a value creation process using the Extra-Organisational Collaboration? | ➢ No explicit design of a process to support inter-firm collaboration to create new value. | ➢ The phases of extra-organisational collaboration: Awareness, Motivation, Enlistment, Mediation and Synchronisation, Sharing, Defining and Creating, Reflection. |

Table 5.1 Summary of Research Question Findings

### 5.4.1 Summary of Research Findings

#### 5.4.1.1 RQ1 What drives firms to develop new business value?

The literature review showed that the basis of operating in a competitive market place, where firms compete either directly (by offering similar value) or indirectly (competing for a share
of the customer’s wallet) requires the firm to establish a position with the customers whereby the value they offer is considered worthy of the required investment by the customer. S-D logic has demonstrated the extension of value creation away from a simple good based logic to deliver a broader range of services and experiences within the value proposition. The increasingly specialist nature of firms has altered the idea that value creation as a process is self-contained within the firm. S-D logic has changed the value creation dynamics of the firm, requiring firms to interact with other actors in the social and economic environment to co-create new value propositions. The rapid advances in technology as well as a growing level of customer access to market information requires firms to continually create new value to stay relevant in the eyes of their consumers. The process of creating value that enables an ongoing relationship with existing customers or develops a relationship with new customers ensures the economic sustainability of the firm. The case study work demonstrated that new value could be co-created as customers, customer firms and supplier firms collaborated in a value network. The customers and firms involved in the cases could access new skills, knowledge and resources to co-create new sources of value. The new value created formed the basis for creating a differentiated customer offering.

5.4.1.2 RQ2 How do customer and supplier firms currently form collaborative partnerships and relationships?

Traditionally under a good dominant logic firms engaged with other firms and customers to supply goods that were the basis of the exchange transaction. The core focus of management was to efficiently manage these exchange transactions. The evolving nature of the firm has meant that reduced levels of horizontal and vertical integration have required firms to partner with other firms in the supply chain to deliver value to customers. According to Dagnino and Padula (2002, p9), the desire to collaborate to create new business value “stems from the acknowledgement that, within inter-firm interdependence, both processes of value creation
and value sharing take place, giving rise to a partially convergent interest (and goal) structure” giving rise to a cooperative system of value creation. Under S-D logic the basis of the business value creation process has changed to focus on delivering a full-service experience of which goods play a supporting role. Modern business relationships are now concerned with developing shared understanding of the value that can be co-created and shared through a process of collaboration. The literature review and the case studies identified the importance of there being a shared interest present to stimulate the desire of firms to collaborate. In addition to the shared interest, there needs to be recognition of the participating collaborators of the benefit each of the participating firms can add to the collaborative endeavour. The research literature and the case study analysis recognises that one of the firms needs to take on the role of the hub firm and act to bring together the potential partners to develop and gain the shared vision of the collaborative exercise.

The literature and case study analysis would suggest that some form of pre-existing relationship needs to be present for the participants to commence collaborating. This pre-existing relationship enables the collaborative activities to commence from an established level of trust and understanding of each other’s capabilities. The literature review demonstrated that the existing relationships within the network of actors does not necessarily need to arise from an existing commercial relationship. The literature review and the case studies demonstrated that the relationships at the genesis of the co-creation exercise can arise from a range of business and social contexts, however evidence from the cases would suggest that an existing commercial relationship between at least two of the initial collaborators increases the chance of success.

The level of trust needed to initiate the collaboration is unclear, but the nature of an existing relationship would suggest that a level of trust between the collaborative parties already exists. The research suggests that the existence of a central hub firm will facilitate the
development of trust and clarify the purpose for the collaboration. Furthermore, the notion that this hub firm is a critical agent in establishing the extra-organisational collaboration, suggests that further research into the role and purpose of the hub firm is warranted.

5.4.1.3 RQ3 What role does the extended business network of key business managers play in the identification, sourcing and establishment of extra-organisational collaborative partnerships?

As discussed in Section 5.4.1.2, the existence of a relationship between the collaborators is an important element for successfully triggering Extra-Organisational Collaboration. However, it should be noted that not all collaborators must know one another prior to engaging in the collaborative endeavour. Payne, Storbacka and Frow (2008) suggest that network members with a history of interaction will be better positioned to successfully co-create based on prior experience, existing levels of trust and a more advanced starting point for learning than those new to the collaborative network. Both the literature and the case studies would suggest that the extended the social and economic network of the actors plays a critical role in determining the participants in the co-creation endeavour. The case study analysis has indicated that the presence of a relationship between some of the collaboration members is important, but that the hub firm plays a pivotal role in bringing together their network of contributing partners. The literature review suggested that the even though participants may know each other, a period of thinking, conceptualising and relationship building will be necessary to adapt the existing way that members interact with each other. In the three case studies analysed, all the value creation exercises arose from an identification or development of an opportunity following a period of discussion and engagement between existing business associates. In the case studies these relationships were either associative, members of a business association or commercial firms participating in an existing supply chain relationship. The research would support the importance of key business managers looking to
their extended business network when formulating Extra-Organisational Collaboration endeavours. The research suggested that the success of the collaborative endeavour may be impacted by the type of network relationship existing between participating firms or members of those firms. Keast and Hampson (2007, p366) suggested that relationships involved in a co-creation endeavour need to “move beyond a competitive orientation and focus on building and nurturing more cooperative relationships”. Further research and analysis is required to understand the roles and influences of associative and commercially based networks on the successful deployment of Extra-Organisational Collaboration.

5.4.1.4 RQ4 How are successful value creation exercises coordinated within a process of Extra-Organisational Coordination?

The research identified four areas that have a large influence on the success of the Extra-Organisational Collaboration: (i) the existence of a network of social and economic relationships that can be used to develop a collaborative network; (ii) the level of trust between collaborating partners; (iii) the development of a central vision along with defined outcomes expected from the collaborative activities and (iv) the role of the hub firm and collaboration coordinator.

The case studies identified a relationship between the participants in an Extra-Organisational Collaboration and the existing business or social network of the firms or the managers within those firms. According to Dwyer, Schurr and Oh (1987, p12), “the basis for future collaboration may be supported by implicit and explicit assumptions, trust and planning” that arise from an existing business relationship between buyers and sellers. Dwyer, Schurr and Oh (1987) posit that relationships between buyers and sellers evolve through five phases: awareness, exploration, expansion, commitment, and dissolution. The case studies highlighted changes in the nature of the relationships between the parties participating in the
Extra-Organisational Collaboration. These changes were evident during the exploration of an opportunity, expansion of the existing relationship to engage in a value creation exercise and the commitment of the parties to create the new value opportunity.

Building trust, or appearing trustworthy to potential collaboration partners, will be of critical concern for organisations and members of organisations who wish to attract value creation partners into their processes of Extra-Organisational Collaboration. According to Doney and Cannon (1997) trust operates as a qualifier in the process of prospective partners considering a firm as potential partner and that developing trust is a an investment with long-term or future paybacks. Doney and Cannon (1997) suggest that developing trust in both firm and management are a factor of firm size and reputation, a willingness to customise, a willingness to share confidential information and length of relationship, expertise and frequency of interaction. The case studies and literature highlighted the importance of trust and supported the role of trust in de-risking the process of Extra-Organisational Collaboration.

The role of the hub firm and collaboration coordinator are critical to the process or Extra-Organisational Collaboration. The process of value creation requires a constant assessment of progress, management of decisions, engagement of appropriate partners with relevant capabilities in a timely manner. The establishment of a hub firm is something that appears to occur because of one of the collaborative partners identifying the value opportunity and becoming more strongly motivated to bring together the relevant partners to outwork the opportunity. The case study analysis supports the idea that the hub firm is at the nexus of the value creation opportunity and is a firm that is most motivated to see the opportunity for new value realised.

From the case study analyses, the collaboration coordinator appears to be a more formal role that is established as part of the enlistment phase of the collaboration where the parties agree
to a specific group or individual taking the lead. The relationship between the hub firm and the collaboration coordinator is unclear and certainly requires further research to develop a greater understanding of the dynamics of the two roles and the need for a level of dependency between the location and generation of these roles.

5.4.1.5 RQ5 What are the key phases of a value creation process using the Extra-Organisational Collaboration?

The literature review was relatively silent in defining a clear set of activities or phases of activities that underpinned an inter-firm collaboration. Keast et al (2004) and Vargo, Maglio and Akaka (2008) identified that networks of firms collaborate to create a service system and a unique governance and delivery process to co-create new value propositions. Frow et al (2015) and Ylimaki and Vesalainen (2015) suggested that managing co-creation utilises a co-creation design framework and recognise the need for a framework or platform to facilitate collaborative endeavours. General findings from this research suggest the managing within an existing business network, presence of trust, shared visions and a clear understanding of the governance framework of the collaborative endeavour were critical success factors for any collaborative endeavour. Ostendorf, Mouzas and Chakrabarti (2014, p510) identify that “companies need to address multiple factors throughout the process of innovation. These include the leveraging of resources, finding ways of enabling interaction in the network (secrecy agreements) and protecting ownership. Our findings demonstrate the importance of linking innovation and property rights”. The case studies demonstrated the way in which Extra-Organisational Collaboration managed the process to take into account the factors of successful collaboration. DeFillippi and Roser (2014, p35) state that “co-creation needs to be an adaptive, yet replicable business process given that relationships take on a different character and have different managerial implications” when engaging the collaborative network. The case study research highlighted the need for a structured process of engaging
the collaborative network and framing an appropriate governance structure that supported the co-creation activities.

The case study analyses examined the operant phases or steps of the proposed Extra-Organisational Collaboration process model. The findings provided some support for the existence of a framework that guided the process of formulating, structuring and managing the process for Extra-Organisational Collaboration. In the cases analysed, the process of Extra-Organisational Collaboration certainly played a role in demonstrating the process whereby the value creation exercises could be established and managed. Further research is required to better understand the extent to which the process of Extra-Organisational Collaboration could be applied in a much broader context.

5.5 Implications of Theory

This research has contributed to the theory of value creation and especially to the theory of business collaboration and co-creation by identifying roles and processes that help describe how firms can come together and collaborate to create new value that can be provided to customers and extend the sustainability of the firms involved. The case study analyses provided support for the process and existence of roles that should be present when firms undertake value creation through a process of Extra-Organisational Collaboration.

The literature reviewed in the pursuit of this research disclosed the dearth of empirical investigation to better understand the processes of how firms establish a collaboration exercise to create new business value. The empirical exploration of the practices of value creation using a form of Extra-Organisational Collaboration provides a foundation for further research in this area to enable the managers of firms to better execute the creation of new value through partnerships with members of their business network. The researcher understands that some of the findings may not be novel and can be corroborated or contrasted
by other similar investigations and research in the areas of discipline covered in this research. Nevertheless, the research provides new perspectives, constructs and evidence which strengthen the validity of the existing body of knowledge and identifies opportunities for further research.

The research provides a contribution to the concept of the hub firm and its role in inter-firm collaboration. The combination of this additional support combined with the concept of the collaboration coordinator points to an area of further research that will add much to the practice of collaboration as a process of developing new business value. S-D logic’s support for the idea of co-creation enhances the need for a process of working in and across organisations in a collaborative endeavour, the importance of which is discussed at length in the literature, and is an area of significant theoretical interest. This is especially so in the light of the evolving nature of the global economy, the specialisation of firms and the role of technology which are severely disruptive to the traditional vertically and horizontally integrated approaches to value creation. This research has laid out a significant theoretical platform and explored the factors that drive success within that platform to enable firms to successfully participate in exercises of Extra-Organisational Collaboration to create new value.

In summary, the contributions made by this research are summarised in Figure 5.1:
The diagram above provides a summary of the three specific contributions of this research to the existing body of knowledge pertaining collaborative business value creation. The roles of hub firm and collaboration coordinator provide a basis for establishing and managing inter-firm collaboration and the process of Extra-Organisational Collaboration provides a framework for firms to progress value creation activities in a collaborative manner.

5.6 Implications for Practice

The evolution from vertically and horizontally integrated firms to a series of more specialised and focused firms is a continuing phenomenon occurring within the global economy. Firms continue to strive to drive down non-core transaction costs and focus on those value creation activities that provide the firm with new sources of competitive advantage. S-D logic would suggest that this increasing specialisation of firms and the need to create more complex value propositions is resulting in a greater need for partnering with firms upstream, downstream and horizontally. The ability to create new value will remain paramount to all firms, but
increasingly so for firms with a direct customer engagement. An ability to build constructive partnerships across the value chain will enable firms to participate more closely and build an increase in value for the entire supply chain, including the consumer as they take on the role of the prosumer.

An ability to engage in co-creative collaborations that involve not only customers but also others in the supply chain presents a unique opportunity to build new value and create competitive barriers to entry. The challenge for firms will be to build a robust process of creating Extra-Organisational Collaborative endeavours across their supply chain and with new partners who bring new value to the solution being delivered to end customers. The development of the model for Extra-Organisational Collaboration provides firms, both customer and supplier, with a framework upon which to build new collaborative value creating networks. The framework also identifies key roles which enhance the successful management of the value creation process in an environment of collaboration.

The explanation and discussion around the importance of the hub firm is a critical element managers need to consider in building value creation opportunities. The need for a firm to take the lead and become the nexus of the idea and to stimulate thinking, debate and discussion around the new value opportunity. The ability to take on the persona of the hub firm to stimulate and motivate potential collaborative partners is a critical role that firms will need to become comfortable with if they are to successfully engage partner firms in the creation of new value. The potential for all firms to play the role of hub firm at some point is highly likely as networks will form and disengage as the evolution of the value offer of each firm takes place over time.

The role of collaboration co-ordinator is also a critical notion presented by the research. Within the governance framework that surrounds the co-creation activities and the formal
nature of the collaboration the collaboration co-ordinator plays a critical role in providing a focus point for the governance model. Whilst the hub firm is role that arises when the opportunity to create value is identified, the collaboration co-ordinator is a much more formal role that must be agreed by all the participating parties. The collaboration co-ordinator is a central player in stimulating the dialog, learning, sharing and delivery activities. The role becomes responsible for ensuring the collaborative process is a success.

The researcher does not intend to make the judgement that any firm or only specialist firms can lead an Extra-Organisational Collaboration endeavour. However, in the light of the present research findings, the researcher considers the ability to identify and develop individuals who can take on the role of collaboration coordinator will also be a key success factor of all firms wanting to engage in Extra-Organisational Collaboration. The role of the Collaboration Coordinator is a pivotal organisational role needed to create the shared vision and manage the process of value creation. Supporting the appointment of a collaboration coordinator is critical to the effective management of all the participating firms and must be supported by all the participants if they wish to ensure access to their share of the value created. Locking in on the shared vision and driving the decision-making framework and extracting and fulfilling commitments made by members of the collaborative endeavour are critical tasks that underpin the creation and maintenance of trust, a future desire to collaborate and the creation of new value that ensures the sustainability of the firm. The collaboration coordinator will also play an important role in moving the partners in the collaboration through the Extra-Organisational Collaboration process.

The research process and the analysis of the case studies has supported the significant requirement for a process that frames Extra-Organisational Collaboration as a platform from which partner firms can build new value. The partnering cycle and the underlying principles of trust, developing a shared vision and the appropriate governance framework are central to
the success of any collaborative exercise. The seven phases of Extra-Organisational Collaboration provide a framework against which participants understand their readiness to progress to the next phase of building new value, while also ensuring that the value created can be shared amongst the collaborating partners in an equitable manner. Developing processes and techniques for becoming aware of value creation exercises was outside the scope of this research activity. However, whether as part of an Extra-Organisational Collaboration or internal value creation exercise, this is a skill that is critical to the long-term sustainability of all firms. Once aware of the opportunity the ability to identify firms and other actors who can assist with the development of the value creation opportunity is the beginning of the process of Extra-Organisational Collaboration. At this point, a firm's commitment to co-create a new value proposition will be signalled by the firm's willingness to play the role of the hub firm and seek to motivate other firms to participate in the co-creation opportunity.

The researcher is aware that the motivation phase can be very challenging as “organisations will develop their own shared assumptions and values, which shape how firms and individuals behave and cooperate” (Bstieler & Hemmert 2010, p485). Organisations bring a predetermined mindset around competition and co-operation and aligning the interests and assumptions of the partnering firms can be a complex process. The desire of the firm to collaborate and co-create new business value will be heavily dependent on and will require an understanding that “nonfinite, symbolic and idiosyncratic resources, such as altruism, trust and reciprocal exchange, make resources increase in value when they are shared with selected firms in a cooperative network” (Dagnino & Padula (2002, p24). The ability of the hub firm to engage the partnering firms in the construct of sharing valuable resources, skills and knowledge to create new value will be critical in developing a shared motivation for the collaborative endeavour. The strength of the relationship and the experience of the
participants with each other will be a major factor in the ability of the hub firm to engage partners in the prospect of building value through Extra-Organisational Collaboration.

While the process of Extra-Organisational Collaboration is defined as a series of process steps from awareness of the opportunity, through motivation of potential partners, enlistment of the firms or individuals who are best able to contribute to the value creation opportunity, then mediating and synchronising. The collaborative outcomes of the process ensure any value created is appropriately shared. The Extra-Organisational Collaborative process can be separated into two distinct phases; the sharing, defining and development of the process for creating the value through to a process of execution and reflection. The initial stage is the forming stage where the partners come together and agree on the scope of the opportunity and how the spoils of any value created will be divided. The second stage is the doing stage where the team comes together to create the desired value opportunity. Executing well in both stages of the process is necessary to deliver a successful Extra-Organisational Collaboration outcome.

While the researcher recognises that, within the practical activities of value creation, several tried and tested development approaches exist, the discipline of working through the phases of the forming stage and the doing stages of the Extra-Organisational Collaboration in a robust well considered manner appear to be a major factor in determining the success of a value creation exercise.

5.7 Limitations

This research presented evidence of the essentiality of a process to manage the establishment and ongoing delivery of new value through a process of Extra-Organisational Collaboration. The case study research was built up from a small number of cases based on the experience and observations of the researcher. The cases also tended to be limited to a common value
creation scenario, that of software based value creation, and this may limit the ability of the model to be applied across a broader set of value creation opportunities. This process may limit the extent to which the findings can be generalised to other firms. Further research is required to understand how the model could be applied to other non-software based value creation opportunities. Additionally, the case studies all had BW as a common participant and as a consequence this may create unidentified factors that would impact the generalisability of the model.

Furthermore, the research focused on the model of Extra-Organisational Collaboration presented in this thesis and may exclude other valid models or activities useful in describing the process of value creation via inter-firm collaboration. Although the researcher has attempted to focus on information from cases that demonstrate the processes underpinning the model of Extra-Organisational Collaboration, the findings may not be representative of the whole industry as even homogeneous organisations may differ entirely in their collaborative practices and approaches. The researcher has not attempted to avoid subjectivity and bias in the research as the case study analysis was undertaken as an approach to explore the model of Extra-Organisational Collaboration based on the researcher’s personal experience managing value creation using this model. The participation of the researcher in the formulation and analysis of the model of Extra-Organisational Collaboration has enabled the author to construct the model. Guba and Lincoln (1985, p162) argue that “if theories and facts are not independent, it is impossible to divest inquiry of some amount of human judgement. The investigator must determine when an appropriate balance is reached such that the ‘facts’ support the proposed (grounded) theory and the proposed theory does not over-determine the facts”. Guba and Lincoln (1985) further suggest that purposeful sampling and conducting emergent designs requires a level of interaction to allow the definition of the theory to occur. The knowledge and awareness of the author as a participant may also limit
the application of the model in other value creation exercises where the author is not a participant.

5.8 Implications for further research

This research attempted to explore Extra-Organisational Collaboration as an approach for creating new business value. The research may have taken a broader view S-D logic in the context of value creation through collaboration; however, the research has projected factors underpinning successful Extra-Organisational Collaboration that can be studied in further detail to develop a deeper understanding of the following issues.

5.8.1 The role of the hub firm.

The future analysis of the hub firm should look to understand the following propositions. Firstly, to determine whether role of the hub firm can arise in either a customer or supplier firm and secondly, to better understand the characteristics of both the hub firm and the leaders of that firm to determine if there are any specific characteristics that would-be determinants of a firm taking on the role of hub firm.

5.8.2 The role of the collaboration coordinator and the key skills and capabilities that underpin success.

In future analysis of collaboration coordinators, identifying the skills and capabilities that successful collaboration coordinators possess to identify if the collaboration coordinator is a role or skill set that should be recruited into firms to improve the effectiveness of their collaborative value creation.
5.8.3 Determining a broader application of the process of Extra-Organisational Collaboration

The process of Extra-Organisational Collaboration has been examined against a specific set of firms and with a specific market segment, further research needs to test the ability for firms operating in different markets and organisational models to determine the adaptability of the model to other firms and markets. The model needs to be tested against different firm cultures and structures and market constructs.

In addition, further process related research is required to gain a deeper understanding of the process of selecting appropriate collaborative partners. Alternative approaches to managing the partner selection requirements are to either deal with partner selection as part of the Enlistment phase or to create an additional step in the process dedicated to partner selection. As many businesses operate within an existing business network, a deeper understanding of how closely or how often collaboration partners are selected from an existing business network versus searching beyond the network.

5.8.4 Developing a better understanding of the activities and factors of each process stage that are critical to successfully establishing and creating new business value.

A more detailed analysis of the process stages of Extra-Organisational Collaboration should be undertaken to identify the ability of each process to stand alone and to further identify the entry and exit criteria for each stage to provide a better framework for improved quantitative and qualitative monitoring and measuring the success of the value creation process. In the MT case, the research identified a need to exit the relationship, additional analysis is also required to understand if the exit process is part of the Extra-Organisational Collaboration process or indeed a separate business problem requiring analysis.
Perhaps an area of further research that would be beneficial is to gain an understanding on the transition from collaborative value creation to collaborative value management. In the MT case the need to exit the relationship arose when MT decided to exit the product that had been created. This would suggest that there is a transition path from value creation to value management that needs to be understood, in particular the process for transitioning from creation to management.

5.9 Summary and conclusions

This chapter has highlighted and discussed the conclusions pertaining to each of the research questions. The research examined existing literature and analysed a body of case study evidence to provide support for the model of Extra-Organisational Collaboration proposed by the author. A greater understanding of inter-firm collaboration will be a critical factor in managing future value creation for most firms.

The study of Extra-Organisational Collaboration has presented a framework for building successful inter-firm and customer collaboration processes and has highlighted some key factors that require further research and analysis to determine the ability to further generalise the findings of this research across a broader cross section of firms and industries.

Organisations need to share, collaborate and learn from each other to maintain the attractiveness of the value they offer to the market if they intend to prosper and keep up with the ever-changing business environment. In all firms, there is a crucial need to constantly enable organisations to take advantage of the knowledge, resources and capabilities of their partners and customers to gain and maintain a competitive advantage. Don Tapscott author of Wikinomics argues “the need for a greater understanding of collaboration and its role in creating new business value is important not just because it's a better way to learn. The spirit of collaboration is penetrating every institution and all our lives. So, learning to collaborate is
part of equipping yourself for effectiveness, problem solving, innovation and life-long learning in an ever-changing networked economy” (2013, p5)
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