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TIINA LEPOSKY

Servitisation in Value Creating Relationships

Views from Headquarters,
Subsidiaries and
Customers

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Reviewers Professor Rebecca Piekkari
Aalto University
School of Business, Department of Management
Runeberginkatu 14-16
00100 HELSINKI
FINLAND

DOCENT/ASSOCIATE PROFESSOR CHRISTIAN KOWALKOWSKI
LINKÖPING UNIVERSITY
DIVISION OF INDUSTRIAL MARKETING, DEPARTMENT OF
MANAGEMENT AND ENGINEERING
S-581 83 LINKÖPING
SWEDEN

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Tiivistelmä Kansainväliset tuotantoyritykset pyrkivät yhä useammin lisäämään palveluiden määrää tarjousvalikoimassaan ja luomaan arvoa olemalla palveluorientoituneita. Tämä prosessi tunnetaan palvelullistamisena ja se perustuu pitkälti yritysten kykyyn ymmärtää asiakastarpeita ja -haluja ja vastata niihin. Tämä saattaa olla hankalaa kansainvälisille yrityksille, sillä tieto asiakkaista on asiakasvastaavilla, mutta päätökset resurssien jaosta tehdään tyypillisesti emoyrityksessä, jossa ei välttämättä ole suoraa asiakaskontaktia. Teoreettinen viitekehyseni perustuu omaksumiskyvyyteen ja antaa pohjan arvonluonnin tarkasteluun ilmiönä yrityksen henkilökohtaisissa ja rakenteellisissa suhteissa. Tutkimus keskittyy yhteen kansainväliseen teknologiayritykseen, jonka organisaatiossa on vastikään aloitettu palvelullistamishanke. Tässä kontekstissa tutkin seitsemää asiakasvastaparia. Keräsin yhteensä 32 haastattelua, joista 7 tuli asiakkailta, 13 asiakasvastaavilta tai tytäryhtiöiden tukihenkilökunnalta ja 12 emoyrityksen työntekijöiltä. Data on koodattu ja analysoitu käyttämällä NVivo-ohjelmistoa. Tuloksissa on useita näkökulmia arvoon prosessiluonteisena ilmiönä, ja ne osoittavat, että arvonluontiin liittyviä tekijöitä löytyy sekä henkilökohtaisista suhteista asiakkaiden ja asiakasvastaavien välillä sekä organisaatiotason suhteista tytäryritysten ja emoyrityksen välillä. Lisäksi voidaan todeta, että asiakkailla on myös suora yhteys organisaatiotasolle asiantuntijarakenteiden ja digitalisaation kautta ja näitä voidaan hyödyntää arvon luonnissa. Tutkimuksen keskeinen kontribuutio on palvelutoiminnan yhdistäminen tytäryhtiöiden ja emoyritysten keskinäisiin suhteisiin liittyvään tutkimukseen. Esitän työssä myös uuden tavan käsitteellistää omaksumiskyvyyttä liittämällä yhteen mikro- ja mesotasot. Asiakkaiden, tytäryhtiöiden ja emoyrityksen näkökulmat työssä mahdollistavat monipuolisen näkemyksen arvonluonnista palvelullistamisen kontekstissa.		
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Abstract International manufacturing companies are increasingly adding services to their portfolios or trying to become more service-oriented in their customer relationships in a bid to create value. This process is known as servitisation and it is largely based on the company's ability to understand customers' needs and wants, and respond accordingly. This can be difficult for international companies, because their customer knowledge is acquired by key account managers in subsidiaries, while decisions about resource deployment are typically done by the headquarters (HQ) without direct customer contact. My theoretical framework based on absorptive capacity conceptualises value creation through knowledge absorption as a phenomenon in the personal and organisational levels of a company. This research focuses on one international manufacturing company, which recently started a servitisation initiative. In this context, I examined seven customer dyads as embedded cases. I interviewed 32 respondents: 7 customers, 13 key account managers or support staff in the subsidiary, and 12 HQ staff. I coded and analysed the data using NVivo software. The results present new perspectives on value as a process phenomenon, and show factors in the personal relationship between the customers and key account managers, and the organisational relationship between the subsidiary and the HQ, which can affect value creation or even prevent it. Furthermore, it was found that the customer has a direct connection with the company's organisational level through expertise structures and digitalisation, which can be leveraged for value-in-use within the partnership. This study contributes to the intersection of servitisation and subsidiary - HQ relationships, and offers a novel conceptualisation of absorptive capacity connecting micro and meso-levels of research. Incorporating customer, subsidiary and HQ voices in the study enables a rich understanding of value creation.		
Keywords Value creation, co-creation, servitisation, absorptive capacity, subsidiary-HQ relationship, customer knowledge		

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Abbreviations

B2B	Business-to-business
CDL	Customer-dominant logic
CRM	Customer relationship management
EMEA	Europe, Middle East and Africa
HQ	Headquarters
IoT	Internet of Things
KAM	Key account manager
KBV	Knowledge-based view
MNC	Multinational company
NA	North America
OEM	Original equipment manufacturer
R&D	Research & development
SA	South America
SDL	Service dominant logic

1 INTRODUCTION

In this chapter I will introduce the personal motivation and research background that form the backbone of this study. I will also clarify the positioning of the study in relation to the relevant research fields it contributes to, as well as the objectives, definitions, limitations, and structure of the study.

1.1 Background of the Study

Working with international manufacturing companies undergoing servitisation (a preferred term for company-wide transition from product manufacture to service or solution provision) for seven years, I often dealt with sales people who were frequently disappointed that they did not receive the support they needed to respond to their customers' requests, and frustrated because they were told to sell solutions they were unsure how to sell. On one hand, the message was to provide more value to the customer through services and solutions, while on the other hand delivering the self-same services and solutions often led to delays or complications that resulted in customer complaints.

My curiosity about servitisation was peaked through these experiences and led me to investigate the area further. Services for manufacturing companies are complicated processes that require new front-end and back-end competencies and also co-ordination between them. The issues of servitisation in one company I worked for were condensed in a story circulated among the sales people. According to rumour, a customer had made a complaint about an automated message that the company was "out of stock" for consultancy. The complaint led to an investigation and it turned out that the stock warehousing unit was unable to complete a delivery report without a physical item for each order line, including service. To circumvent the problem, the unit had placed a pile of papers to represent service items and the robotic system compiling the stock items took a paper to mark the order as complete. As the unit had run out of paper and no-one had noticed to replenish it, the system did as it was programmed to do and sent out an automated out-of-stock notice – for consultancy.

Whether it was true or merely an anecdote is irrelevant to the fact that stories such as this were shared in the first place. They represented the central worry that sales people were expected – indeed, targeted – to sell services and solutions but in doing so they might do damage to their relationship with the customer. The organisation was in transition, but procedures supporting service delivery were

still partly lacking and the new situation was confusing for the customers and internal staff. The stress of being forced to change their familiar and heretofore successful sales methods was exacerbated by the lack of guarantees that the end result would provide superior value.

This study was borne against the backdrop of my experiences working with sales people who wanted to ensure their continued customer relationship and thus income; managers, who wanted to ensure long-term company longevity and competitiveness in an increasingly service-oriented, international market; and customers, who wanted to get what they had paid for and preferably a little more. All were striving for the same goal, to create customer value, but all were approaching the issue from a slightly different point of view.

The prevalent view among practitioners and scholars alike is that adding services to their offering can provide benefits to manufacturing companies (Oliva & Kallenberg 2003), and transitioning to a business model focused on service provision will consequently maximise on those benefits (Baines et al. 2017). Yet the difficulties surrounding a successful transition have also been widely acknowledged. Companies such as Xerox, once hailed as one of the front-runners in service transitions, recently divided their service and manufacturing arms into separate companies, while researchers have increasingly turned their attention to the issue variously called reversed servitisation (Finne, Brax & Holmström 2013), deservitisation (Kowalkowski et al. 2017) or servitisation failure (Valtakoski 2017). There is thus a dichotomy in that the best intentions of service providers do not always lead to desired outcomes.

While literature on servitisation has increased dramatically over the last few years, many of the central issues are still unresolved and a full understanding of how servitisation creates value remains inconclusive (Visnjic Kastalli & Van Looy 2013). Baines et al. (2017) found in a review of servitisation literature that the process of servitisation has received less attention than the configurations of how to deliver the service. Because manufacturing companies often operate internationally the servitisation process tends to also occur on an international level, which is not generally factored in the analysis. Yet if the aim of servitisation is to create or co-create superior customer value, recognising that customers in different markets and cultures are likely to respond to service initiatives differently seems relevant to the discussion.

This study examines a servitisation initiative in a multinational company (MNC) and places customer value as the focus. Knowledge is an integral part of servitisation because new knowledge is required to develop services (Hobday, Davies & Prencipe 2005) and because knowledge sharing is needed for value co-

creation (Grönroos & Voima 2013; Lusch, Vargo & Tanniru 2010). Knowledge is also a driving force in international business literature relating to subsidiary – headquarters (HQ) relationships because MNC's operate as networks through which knowledge is passed. Therefore, this work uses the knowledge-based view (KBV) as the theoretical lens to explain the phenomenon in context with absorptive capacity specifically as the tool to examine the process.

According to KBV, knowledge is a resource that differentiates a company from its competition. Customer knowledge gathered through interactions is valuable, rare and inimitable because insights into the customer's processes are only shared in trusting relationships and because no other company shares the same kind of international network from which knowledge can be gathered and synthesised. Absorptive capacity is used to evaluate a company's ability to gain new knowledge, process it internally and monetise it. In literature this has often been used as a simple construct, such as using research and development (R&D) as a proxy (Cohen & Levinthal 1990; Tsai 2001), or describing it as an ability that the company has (Tzokas et al. 2015; Winkelbach & Walter 2015). Other works have conceptualised it as a process, which can be dyadic (Lane & Lubatkin 1998; Ebers & Maurer 2014) or structural (Schleimer & Pedersen 2014). Using the four-stage model of Zahra and George (2002) as a foundation, this work builds on the process approach but expands it to encompass value co-creation in the external relationships and servitisation in the internal company structural relationships.

This work enhances theory by presenting absorptive capacity as a process that spans the micro and meso levels of an MNC. As servitisation contains the individual level ability to gain knowledge about customers' needs and the organisational ability to respond to them, this study examines the interplay between customer – sales person relationships and subsidiary – HQ processes. Through interviews with seven customers of a case company in five different countries, 13 of their corresponding sales persons and local support staff, and 12 HQ strategic and operative personnel, this study maps different points of view on value, service, service quality, relationships and functionality of internal processes. Their views and experiences demonstrate how servitisation has occurred in a particular company context, reflecting the history of how the company arrived to certain strategic decisions, the geographic variety it deals with, and the complexity of the issue.

This study contributes to the intersection of literature on servitisation in manufacturing companies and international business by showing that in an international context, knowledge about customer needs is acquired and used by different parties in different locations. Thus, providing customer value through

servitisation is subject not only to the relationship between the company and the customer as often envisioned, and is the underlying relationships between individual customers, salespeople and support staff, as well as the meso level relationships between subsidiaries and HQ. The study makes another contribution to KBV by demonstrating factors that influence the application of customer knowledge as a resource in a complex servitisation transformation.

1.2 Research Problem and Objectives

The problem at the heart of this research is that moving the mind set of an international company from product focus to service orientation is a difficult, costly, time-consuming effort, which ultimately may or may not yield value to customers. On a micro level of everyday business practice this problem is evident in the changes that directly relate to the customer and their value processes.

Bounded rationality, which is a necessary condition of KBV (Conner & Prahalad 1996), means that the customer cannot possess all the information the sales person can offer about the company solution. Therefore, the decision the customer makes is based on their incomplete understanding of what the vendor's value proposition is, regardless whether or not it is objectively the most beneficial or efficient. The service logic view on value means that the customer will choose the option that they expect will provide them with the most value, and competing companies can influence future decisions by being involved in the customer's value creating process (Grönroos & Ravald 2011). Purchasing reasons on future occasions may not be apparent for the vendor because they, also, are operating under bounded rationality and cannot fully understand the customer's previous experience of value-in-use (Grönroos & Helle 2010). Thus, whatever choice the customer makes is subjectively the best choice for them at the point of exchange, proving the old adage that "*the customer is always right (even when they are not)*".

This leads to a situation where the company's solution may be the best choice in terms of operational benefits but the customer chooses a less productive competitive offer because they have an incomplete understanding of the value proposition and/or because they expect more personal value from the other option. For example, a good relationship with a sales person, an existing contract that is easy to expand or a familiar product range can all be reasons why a customer might choose a less effective solution based on values (trust, speed, ease) that are highly personal, contextual and difficult to articulate. Servitisation can cause changes in the company's market offer and relationships (Brax & Visintin 2017), which makes it more difficult for the customer to understand their new value

proposition or to evaluate the value proposition from the basis of previous interactions or experienced value-in-use.

On a meso level encompassing the company, servitisation may require changing the company's industry position, structure and capabilities (Brax & Visintin 2017). These are all multifaceted issues that require training staff to unlearn old habits and engage in new processes and worldviews, not to mention the confusion, distrust and uncertainty that accompany organisational change. There are thus compelling arguments that servitisation is fraught with difficulties that may prevent the customer from producing value out of the company actions or the company from producing effective value propositions. However, to understand the value that can be created from servitisation, it is not sufficient to understand what the company must do to servitise, or why it might not work. The crux of the problem is that there is no consensus on how servitisation actually creates value. Furthermore, while value is created by customer but servitisation is primarily an internal issue for a company, literature on servitisation generally assumes that servitisation in the company sphere will translate to value if done correctly.

Consequently, the main research question of this study is: How is value created in servitisation through the knowledge absorption process of an MNC in customer, subsidiary, and HQ relationships? This question is further explored in the following sub-questions:

1. How does value creation in customer – Key account manager (KAM) relationships affect servitisation in the subsidiary – HQ relationship?
2. How do context-bound actor interpretations of value and service influence servitisation?
3. What structures and mechanisms influence the knowledge absorption process in servitisation?

The first sub-question focuses on the interplay between the micro and meso levels of servitisation. Value co-creation occurs in interactions between the customer and the company when knowledge is being shared (Vargo & Lusch 2004). While there are multiple interactions between customer representatives and company staff members from upper management meetings to maintenance encounters, the primary responsibility for acquiring customer information and exploiting it in sales falls on the nominated sales person or KAM¹. This buyer-seller relationship

¹ The abbreviation KAM is mostly used to refer to 'Key Account Management' in general. Because this study is focused on the individual level of the customer relationship, it is here used to refer to the key account manager as a person instead.

can be conceptualised as a metaphorical marriage where the communication behaviours of both sides influence how the parties feel about the outcomes of the transaction (Celuch, Bantham & Kasouf 2006). By being attentive, perceptive and responsive the KAM can influence how the customer feels and thinks about the company and thus guide desired behaviour (Salomonson, Åberg & Allwood 2012). Individual interaction is therefore important in assessing the customer's value experience.

Yet the KAM is not responsible for service delivery, which is an organisational operation, and they must rely on the support of the back office for that. The customer is hardly interested in the back office operations of their vendor but assess the outcomes based on their desired / expected value against their perceived value (Graf & Maas 2008). Barber and Tietje (2008) discuss the option of using lean approaches to personal selling, thus eliminating unnecessary processes that waste customer's time and resources, and instead recommend a "[t]ransition from a sales philosophy that relies primarily on the push method of selling to an approach that more effectively enables the customer to pull value from the firm" (p. 156), an approach they dub as "revolutionary" and closely reflects servitisation. This connection between value in interactions and value in processes acts as a starting point for this study. Thus, the research attempts to determine first the means and ways in which local knowledge about the customer is brought into the greater organisation and how do actors locally and in HQ experience it.

As KAMs occupy a position between the customer and the company, effectively as conduits for knowledge in both ways, their own view of the role and its requirements is needed to understand how they operate as local actors trying to reach their personal targets, and, concurrently, as members of a subsidiary organisation in relation to a HQ unit. Dual organisational commitment is a well-known phenomenon, which has been studied from an expatriate point of view (e.g. Nguyen, Felfe & Fooker 2015) as well as for local staff members, and has been found to be useful in the MNC context as it allows individuals to operate effectively in international settings and promotes a global mind-set (Smale et al. 2015). Furthermore, research suggest that the individual's commitment can involve multiple entities, including customers (Michailova, Mustaffa & Barner-Rasmussen (2016). This study broadens the discussion to include the KAM as a focal actor whose interpretation of the customer's value creation influences the company's value-laden processes, and the first sub-question focuses on understanding how this happens.

In the second sub-question the servitisation process is questioned from the point of view of meanings different actors assign to it. Because the question is wide and

no conclusive answer can encompass the whole phenomenon, this research will approach it by looking at how customers, local staff and HQ staff interpret what is value or service or service quality. Variations in the answers as well as identification of the distinction between value for customer organisation and value for customer representative as a person are used as basis to examine the conditions under which servitisation might not lead to the desired outcome of value.

Barring a few notable exception such as Gebauer, Fleisch and Friedli (2004), Finne, Brax and Holmström (2013), Zhu and Zolkiewski (2015), Kowalkowski et al. (2017) and Valtakoski (2017), the dominant view in the servitisation field seems to be that adding services to the company offer is a unidirectional, value-adding activity. A context-bound explanation of actor perspectives is included here to argue that the link between servitisation and value is more complex than that.

Research on service networks implies that servitisation complexity is borne from the involvement of multiple network partners required for solutions (Eloranta & Turunen 2016). The customer is a key person in innovation but even though knowledge about their needs is with the customer, the ability to satisfy those needs is with the manufacturer (Thomke & Von Hippel 2002). Input from customers is required to initiate processes within the manufacturer's sphere, but the involvement of different people means different interpretations along the chain of communications and interaction. Only the people directly in contact with customer will have the insight from conversations and relationships, through which information is not just relayed in exchange but is imbued with meaning (Lundkvist & Yaklef 2004). The company internal staff, many of them in HQ, will have to rely on the messages conveyed to them by other parties, and their ability to learn, cooperate and coordinate will affect the outcome of the processes (Parida et al. 2015).

Consequently, the second sub-question will examine actor interpretations and link these to the discussion on servitisation complexity and why servitisation may not always automatically become a value creating activity. Skålen et al. (2014) argue that in addition to resources and processes for servitisation, service innovation requires companies to create value propositions that are attractive to the customers. It is therefore assumed in this research that actor interpretations have an impact on servitisation whereby customers and KAMs make sense of value propositions through interactions and lived local context but HQ interpretations are based on the processes and practices that they are involved in.

Finally, the third sub-question delves deeper into the absorptive capacity process and determines the kind of forces that influence it, bearing in mind that some of the stages take place locally and others between geographically and culturally

dispersed units. These forces can be barriers to the efficiency of the process or social or formal structures and mechanism that dictate how the process works. Absorptive capacity entails an element of adding new external knowledge to the existing knowledge base, which may under certain conditions lead to path dependence (Van den Bosch, Volberda & de Boer 1999). Thus, the third sub-question is asked to determine the actors' view of the organisation's ability to respond to new kinds of knowledge, which is required to enact change such as servitisation.

By answering these three research questions I endeavour to come to a fuller understanding about the value creation in servitisation through knowledge absorption in customer, subsidiary and HQ relationships at the heart of the problem that drives the research. The conceptual framework I use to provide structure for the research is shown in Figure 1.

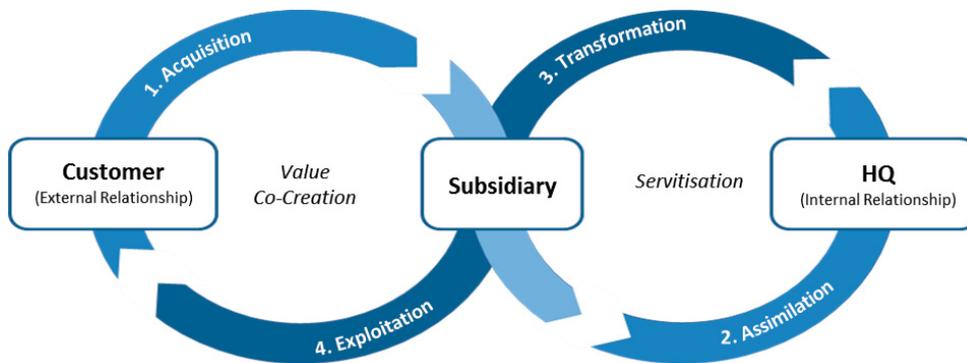


Figure 1. Conceptual Framework of the Study.

This framework acts in a sensitising capacity addressing the primary areas of interest and how they are connected. The framework is designed to leave space for emergent findings that show how the structures and mechanisms work in practice, without the need to validate the actual process itself. Such validation would be largely meaningless in a single-company context because the findings are not generalisable, and therefore the framework is used to provide structure for the study and aid in making sense of the results.

The three main nodes in the framework are the customer, subsidiary and HQ. The relationship between the customer and the subsidiary actors, namely KAMs, is the relationship where value is co-created. The internal relationship between subsidiaries and HQ is where servitisation structurally takes place, as the company value propositions are created, back office operations aligned and resources allocated.

The absorptive capacity process is presented as an infinity-shaped loop, which connects the different nodes. Knowledge is acquired from customers by sales people to the subsidiary organisation, and assimilated between the subsidiary and HQ if there is need. The HQ responds to the knowledge by transforming it into actions, either offering back to the subsidiary some new knowledge or something more tangible in terms of support. This is then utilised by the sales people as they try to exploit the response they received in the customer relationship. This exploitation will presumably only be successful if the customer perceives that the process has somehow answered their need and further interaction with the company will result in them creating more value out of their current or future assets.

Thus, the framework explains value creation as two dyads interlinked with the absorptive capacity process with four knowledge transfer stages, each of which is subject to discrete forces and barriers that influence the efficiency of the process and the successful implementation of the end result.

1.3 Positioning of the Study and Contributions

This study focuses on the phenomenon of value creation through customer knowledge absorption in the shared contexts of servitisation and subsidiary – HQ relationships, and is therefore primarily aimed at contributing to the intersection of these literature streams. The reason why I have deemed it important to link these two contextual fields of study is not only to add the element of internationality to a servitisation topic where it is not often included, but because the international network context has an influence on how the phenomenon is viewed.

Akaka, Vargo and Lusch (2013) argue that for a holistic understanding of value, it should be considered as value in context, namely that micro level interactions occur in the context of macro and meso level influence. This study will advance the view that this influence is multidimensional and while local interactions take place within the company structure and culture, iterative micro interactions build a shared understanding of what the company is and how it operates. For example, sales people can be instructed and trained to sell services, but the shared understanding of what it means to be a service provider and whether this has been achieved emerges through repeated service interactions. Likewise, back office operatives can handle service transactions under common guidelines but the final form of servitisation is constructed from the repetitive actions that individuals take in processing service business, supporting it and championing it.

The two-way influence is acknowledged in literature on the internal relationships of MNC's and provides interesting commonalities with servitisation. In terms of knowledge, the top-down approach from HQ to the subsidiary is the traditional view on knowledge transfer. The HQ has typically been seen as the central authority on strategic decision-making with subsidiaries responsible mainly for operations (Dörrenbächer and Geppert 2006). More recently, studies on subsidiary initiatives and a push for organisational change originating from the country level have increased, and subsidiaries have been found to have an influence on the MNC network if they are able to garner the attention of HQ (Ambos, Andersson & Birkinshaw 2010). This line of research has, however, largely focused on subsidiary relations as a basis of power or autonomy (cf. e.g. Homburg & Prigge 2014; Najafi-Tavani, Giroud & Andersson 2014). This study will therefore draw from the international business literature, but apply it to servitisation to focus less on power and more on value creation that occurs in these relationships.

Absorptive capacity is used as the tool that connects together the local and the global, the micro and the meso. As Cohen and Levinthal (1990: 131-132) state in their seminal work: *“an organization’s absorptive capacity does not simply depend on the organization’s direct interface with the external environment. It also depends on transfers of knowledge across and within subunits that may be quite removed from the original point of entry”*. In terms of servitisation this means that while customers may have definitive ideas about the kind of services that would benefit their operations, this knowledge is not passed on to the organisation, representing a dichotomy between the external and internal environments (e.g. Ebers & Maurer 2014; Lewin, Massini & Peeters 2011; Zhang, Zhong & Makino 2015). Alternatively, the staff at the customer frontline may be well aware of the necessary steps towards value provision, but passing this knowledge or getting others to act on it is an issue in the processes between the subsidiary and its parent (e.g. Schleimer & Pedersen 2014; Song 2014). As a result, there is an ongoing issue with knowledge entering the company at the local level but decisions are made on how to respond to the knowledge in a level removed by function, culture and geography, which extant research has not fully addressed.

KBV as the theoretical lens used in this study assumes that knowledge is the most important resource companies have and the ability to use it for commercial ends comprises their competitive advantage (Kogut & Zander 1993). Accordingly, it is assumed that companies require knowledge in order to operate. The conceptual framework is based on the knowledge absorption process as outlined by Zahra and George (2002), consisting of knowledge acquisition, assimilation, transformation and exploitation. The positioning of this work is presented visually in Figure 2 to

show how the phenomenon is nested in the intersection of two major literature streams, viewed through an overarching theoretical lens.

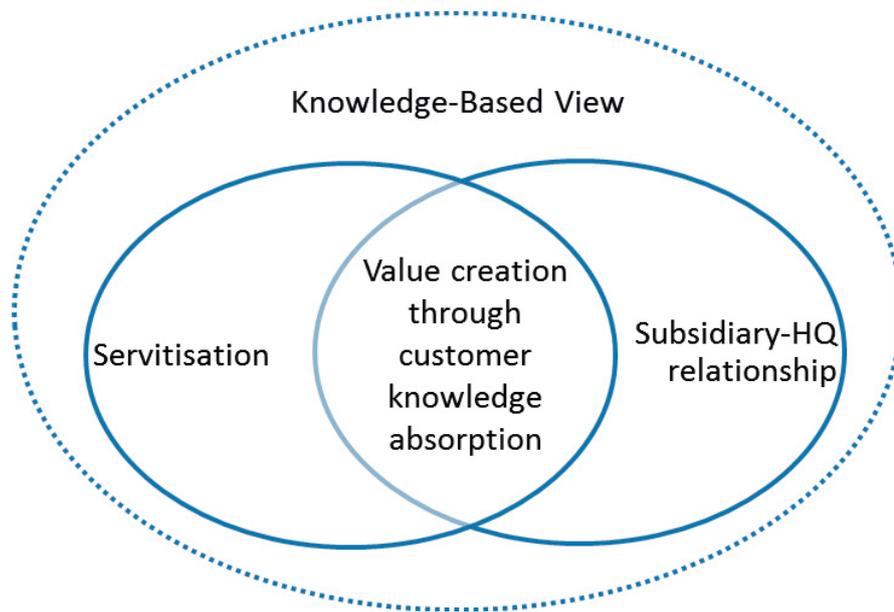


Figure 2. Positioning of the Work

This study aims to contribute to the literature at the intersection of servitisation and subsidiary – HQ relationships of MNC’s. While servitisation mostly occurs in international settings, few works have delved into the complexities of what international context means for manufacturing companies’ servitisation. Studies such as Kucza and Gebauer (2011), Kowalkowski (2011), and Kowalkowski, Kindström and Brehmer’s (2011) examine service sales globally and show among other things that strategic choices regarding subsidiary roles and developing local market sensing capabilities influence industrial service delivery. A more focused look to servitisation in a global context is given by Neto, Pereira and Borchardt (2015: p. 468), who find that local conditions can act as barriers to service provision and raise a call for more research on “*the acquisition, dissemination and use of knowledge in global service operations*”. This study responds to that call and contributes to literature by demonstrating that value creation in servitisation in an MNC occurs in dyadic relationships locally and internationally, and that the nature of these relationships influences the servitisation process.

The work makes a second contribution to KBV through the concept of absorptive capacity, which is used in a variety of contexts. This study builds on the process view of absorptive capacity and offers a conceptualisation that spans geographical locations and multiple functions, showing the effect of multiple relationships on the process and uncovering forces that influence it. Building on the four-stage

conceptualisation of Zahra and George (2002), this work argues that absorptive capacity does not operate directly from customer to company, but rather engages different actors and dyads at the different stages. Various forces influence whether or not the absorption is successful and leads to customer value.

A final contribution derives from the study's philosophical approach. Employing critical realism, the study draws explanations that are context-specific and dig deeply into the existing structures of the case company. Doing this enables understanding the meanings that actors in different locations place on the core concepts with which the company operates. This in turn allows unravelling why people act the way they do within given structures and what consequences these actions have. Such causality cannot be established through the traditional methods relying on a positivist or a socially constructed world-view, and is underrepresented in international business literature as a whole. Similarly, calls for research offering a contextually driven viewpoint where the voice of the individuals is taken into account and challenging the current dominant paradigmatic assumptions have been raised in the servitisation field by for example Pomirleanu, Mariadoss and Chennamaneni 2016, and Luoto, Brax and Kohtamäki 2017. This research aims to respond to these calls.

1.4 Definitions and Limitations

Understanding key definitions is important for clarity and consistency. Table 1 summarises the key terms used in this study. The literature on services and, consequently, value is still in a relatively early phase and multiplicity of terms abound. Servitisation was chosen as the preferred term from the basis that while it covers a wide array of activities, these generally focus on a transition or change within the organisation. Terms such as service development, service innovation or product-service systems tend to be more static or focus on a singular change project within the company.

Service orientation, as shown in Table 1, is divided in two main theoretical approaches: service-dominant logic (SDL) and service logic. SDL as envisioned originally by Vargo and Lusch (2004) and further expanded in their later works (Vargo & Lusch 2008; 2016) is the most all-encompassing approach that considers service the primary task of companies and transcending business activities. Service logic focuses more on companies' activities and a voluntary mind-set (Grönroos & Voima 2013). Rather than seeing service as the fundamental basis for business, it views it as an offer that companies can choose to embrace or discard throughout their operations.

Table 1. Key Definitions

Key Concept	Definition	References
Servitisation	A transition from product-based business model to an emphasis on services; either adding services in the company offer portfolio or as service orientation.	Brax & Visintin 2017
Service orientation	An umbrella term for a business model of a manufacturing company prioritising services that provide customer value over product sales; encompasses companies that have embraced service logic or service-dominant logic.	Grönroos 2008; Vargo & Lusch 2004
Service	Interactional element augmenting services (see below) as the basis of value.	Vargo and Lusch (2004; 2008), Zhu and Zolkiewski 2016
Services	Intangible products as company actions to the customer that are or can be commercialised in relation to the customer's installed base or as standalone service products.	Parasuraman 1998; Oliva & Kallenberg 2003; Raddats & Kowalkowski 2014
Service offer	Used here synonymously with services but emphasising the company perspective and actions.	In line with Oliva & Kallenberg 2003
Absorptive capacity	A four stage process of organisational routines and processes through acquisition, assimilation, transformation and exploitation of knowledge.	Zahra & George 2002; Todorova & Durisin 2007
Value creation process	The complete set of a company's internal, external and shared processes that comprise the development and delivery of value offers.	Grönroos 2011
Value co-creation	Interactions between company and customer enhancing customer's experience of value.	Grönroos 2008
Knowledge-based view	Theoretical assumption that knowledge is a primary resource for competitive advantage.	Barney 1991; Kogut and Zander 1993; Grant 1996
Solution	An integrated combination of company offers (products and services) that respond to a customer need.	Bastl et al. 2012; Brady, Davies, & Gann 2005; Davies, Brady & Hobday 2007
Subsidiary	Loosely defined as any international organisational unit owned by HQ with a sales mandate, including sales units and offices.	
HQ	Corporate executive management supporting other organisational actors of the company.	Forsgren & Holm 2010
MNC	A network of administrative units with heterogeneous resources and interests.	Forsgren, Holm & Johanson 2005
KAM	Company representative primarily responsible for the customer relationship. In the case company, this person is referred to as Mill Sales Manager. However, in this research KAM is used to mean the local customer contact person, as this is in line with extant research on account management.	

This study uses the value definition of service logic because it is considered more fitting with the objectives of the research. While SDL and service logic are not necessarily mutually exclusive, the service logic definition allows the research to separate between the company's actions and its desired outcomes. By offering a sequential process for value creation, service logic enables studying the phases of the process as individual pieces of a puzzle, subject to different dynamics and liable to encounter a distinct set of problems or issues. Furthermore, the focus in service logic is more on the structures, processes and actions of the company, rather than the customer's own value creating activities, which is in line with the aims of the study.

Service logic and absorptive capacity possess processual elements and operate in parallel in the organisation. Both contain external and internal dimensions, as well as the requirement of human agency at the individual level and organisational mechanisms at the organisational level. In service logic, these elements are largely conceptualised through the value creation process where value occurring activities take place in the company sphere, in the interactions between the company and the customer, and in the customer sphere. Absorptive capacity, on the other hand, is a relationship-driven concept where knowledge is exchanged in customer relationships and imported into the company knowledge base.

Where the two concepts are distinctly different is in the aims of what they attempt to explain. Absorptive capacity emerges from the innovation literature, and as an off-shoot of the resource-based view it focuses on firm capabilities as resources that provide firm-specific competitive advantage. Therefore, it is not unusual to find quantitative studies that use R&D as a proxy for absorptive capacity, as in Cohen and Levinthal (1990), while simultaneously the wider literature field may paint it as a capability, a dynamic capability or a process. Absorptive capacity is often used to explain differences in firm performance while service logic operates more from a business model base, explaining why firms operate the way they do.

Literature focusing on MNCs is well established and offers multiple approaches to their structures. This study applies a view on MNCs, HQs and subsidiaries from the business network literature because this most closely relates to knowledge transfers and learning in organisations, and has a history of focusing on how loosely coupled units can influence one another. However, in line with Piekkari and Welch (2010), it is important to note that the human element of the MNC in terms of individual actors and their lived experiences has an important role in this study, which is often neglected in the business network view.

While the study aims to contribute to the current stock of knowledge, it is also limited in many ways. Lack of generalisability is an issue that is often held against

qualitative research and is especially pertinent to cases where there is a single context that influences the research findings. As the attempt is to find firm-specific factors, in this research it is impossible to make definitive statements about the nature of reality spanning all companies.

Furthermore, the conceptual framework providing the basis for the research is by no means all-encompassing. Knowledge enters the company from multiple external locations and influences decision-makers and local actors in myriad ways. The study is therefore clearly limited to a concentration on knowledge about specific customer needs transferred in relationships with KAMs, not all knowledge that pertains to servitisation.

In addition, not all knowledge goes through the same knowledge absorption process in a local and global level. Arguably the majority of customer requests, inquiries and claims are only handled locally, or at most at the regional level. Therefore, the study is limited to the absorptive process in the instances where HQ support is specifically sought for. Excluding the regional level means that at this stage it cannot be confirmed whether applications to regional HQ undergo a similar absorption cycle or if there are variations. Focusing on the global HQ was considered more important, however, because the international reach of the regional organisations was lesser in the case company and because expertise was centralised in the global HQ.

1.5 Structure of the Study

The first introductory chapter of the study presents an overview of the study including the motivation and background from which the research was initiated. This leads to a discussion about the research problem as a general level issue for practitioners and scholars in the field and justifies the research questions, which this study aims to answer and shed light on the problem with the aid of the conceptual framework. Then, the positioning of the research is shown in relation to the relevant literature streams, which will be analysed in the later chapters, together with the contributions the study aims to make to these literatures. Methodological justification is provided on the basis of the research philosophy, and finally the key definitions and limitations of the study are discussed.

The second chapter provides a theoretical review of KBV and the main assumptions of the research are laid out. The substance of the chapter includes the evolution of KBV as a theoretical view with a special focus on knowledge transfer, which is an essential part of KBV. Reverse knowledge transfer as a mechanism for subsidiary knowledge transfer to HQ is discussed as there is a substantial body of

work focusing on it, as well as the impact of cultures and national borders. The chapter also includes a review of absorptive capacity and its development as a concept, what it means as a process, as well as final remarks on the barriers of knowledge transfer.

The third chapter provides a literature review of the servitisation literature with a special focus on relationships. The chapter is divided to first give an overview of service literature as a whole, and then look at the individual level relationship between customer representatives and sales people separately from the unit level subsidiary – HQ dyad. Value is discussed in relation to the customers while business model and structural issues are introduced in the latter part. The conceptual model of the study is restated on the basis of this discussion.

The fourth chapter delves deeper in the methodology of the study and provides a fuller explanation of the philosophical grounding of the work, the justification for using the abductive approach and the qualitative method. Issues of rigour in qualitative research are discussed together with a comprehensive explanation of the case context and the NVivo content analysis and coding method. The case company is described in terms of its historical development and industry situation as this study is looking to develop a contextual explanation. A single case context was chosen for the purpose of delving deeply in the processes, routines and shared meanings of the company.

Chapter five introduces the findings of the study. These are arranged according to the outline of the conceptual framework but not limited to it. Interview excerpts are used to back up the content analysis results. Analysis is done on the level of position (customer, KAM & support, HQ staff), country and unit (subsidiary or HQ) and the emergent themes unpacked.

Chapter six is the concluding chapter and starts with a recap of the results in relation to the research objectives, evaluating the degree to which the results were able to answer the research questions. Contributions and managerial implications are discussed, as well as the limitations and new avenues that were opened up for future studies to address.

2 KNOWLEDGE TRANSFER IN A MULTINATIONAL COMPANY

In this chapter I will look at the theoretical foundations of this study with a focus on the KBV as the lens through which the results of this study are viewed. I will discuss the roots of KBV from the resource-based view and the main assumptions in it, as well as review literature pertaining to knowledge transfer in multinational organisations. Absorptive capacity is the vehicle for knowledge transfer and, as such, I will review the concept and how it has been practically used in studies to explain the specific function it holds for this research.

2.1 Theoretical Foundations of the Knowledge-Based View

The history of KBV is deeply rooted in its predecessor the resource-based view, from which it diverged in its emphasis on knowledge as a primary resource through human interactions and combinative power. The resource-based view has been a staple of explaining company performance since the 1980's when the influential works of Rumelt (1984), Wernerfelt (1984) and later Barney (1991) were published. The origins of the resource-based view, however, go further back to the classical work of Penrose (1959), whose view of organisations as a combination of resources provided a foundation for an approach that conceptualises companies through the unique ways their intangible assets connect and consolidate. The dominant paradigm of the time was heavily focused on products and production efficiency, and widespread acceptance for an organisational view on why some firms fare better than others matured only decades later.

Wernerfelt (1984: 172) defined a resource as “*anything which could be thought of as a strength or weakness*” for a firm and further refined these as semi-permanent assets. Barney (1991: 101) saw resources as things that “*enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness*”. In order for such resources to be considered a competitive advantage, he stated they must be valuable, rare, inimitable and non-substitutable.

While knowledge was not singled out or separated from general human or organisational capital in these early definitions, it ties in when it is considered both as an asset and a capability. The ability of an organisation to understand and respond to market and customer needs relies on the people and mechanisms involved in the process, and is therefore semi-permanent. Knowledge is also undeniably valuable because without it the company is unable to operate in any meaningful way. However, the boundary condition of value has been widely

criticised due to the tautology inherent in stating that valuable resources are those that are valuable, and explanations of value are more readily available outside the scope of the resource-based view (Kraaijenbrink, Spender & Groen 2010). Knowledge inimitability is due to the social complexity of individual interactions in a unique organisation culture, and it is not substitutable by other means such as buying knowledge repositories and integrating their contents because much of the knowledge is tacit.

Finally, there is the question of rarity. Knowledge could be seen as a common resource, i.e. one that does not provide a competitive advantage but may still be necessary for the economic survival of the company because all organisations run on knowledge in one way or another. All companies will have mechanisms in place to send and receive messages from the outside world as well as internally. However, measuring the rarity of intangible assets is very difficult and in the case of knowledge, hardly meaningful. The impact of knowledge is the ability of the firm to recognise it, internalise it in its actions and respond to it with an enhanced value proposition. Thus, rare knowledge does not exclusively mean confidential information or secrets. Rather, the rarity comes from having the ability to source information, for example through relationships, and process it internally.

To acknowledge the difficulty of treating tangible and intangible, tradable and tacit issues as equivalent, Amit and Schoemaker (1993) defined resources as “*stocks of available factors that are owned or controlled by the firm*” and capabilities as the “*firm’s capacity to deploy Resources*” (p. 35, emphasis in original). Capabilities in their view are information-based processes and therefore rely on the exchange of information through human interactions or combinations of human, physical and technological resources. The implication is that there is a difference between having knowledge as a static resource and using the knowledge for organisational gain through a dynamic process of learning and renewing the company. KBV, similarly to the largely parallel development of the dynamic capability perspective (Teece, Pisano & Shuen 1997), diverges from the resource-based view with an emphasis on human agency in the knowledge processes. Thus, it provides a theoretical view that intrinsically straddles the individual level of learning and the organisational level of using that knowledge as an instrument of change.

One of the most influential early works identified as KBV rather than a modification or re-conceptualisation on the resource-based view is Kogut and Zander’s (1992) study proposing that organisations “are social communities in which individual and social expertise is transformed into economically useful products and services by the application of a set of higher-order organizing principles” (p. 384). In this article the authors posit KBV as a means to explain the

existence of firms through the social community they provide and therefore the sum of the culture rises above its individuals. Their focus is on the creation and transfer of knowledge within the context and they state that it is the organising principles of the community upon which both rest. Whether codified (and therefore transferrable) knowledge or process-based (and thus tacit) know-how, the organisation serves as the mechanism to generate and share learning, which then leads to increased sales and market opportunities. Figure 3 shows the process in a simplified form.

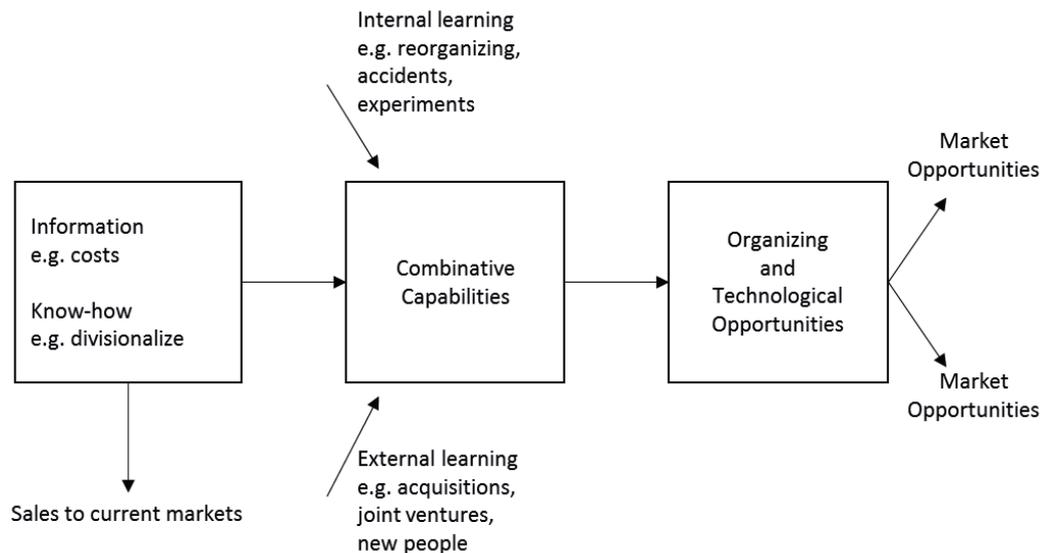


Figure 3. Growth of the Firm (Kogut & Zander 1992)

As seen in Figure 3, Kogut and Zander (1992) divide knowledge to information and know-how the company possesses, but their existence in isolation merely enables continued current performance, not growth. It is the process within the organisation where the knowledge is infused with internal and external learning - the social element - that transforms the knowledge into capabilities, which in turn leads to market opportunities.

While Kogut and Zander's (1992; 1993; 1996) works have been very influential for the development of KBV, the field has not maintained a unified approach. While KBV in these works is specifically posited as an explanation for the firm existence, and that firm boundary decisions are made on the costs of knowledge activities rather than the transaction costs suggested by transaction cost economies, later works have often either questioned these assumptions (cf. Håkanson 2010; Fransson, Håkanson & Liesch 2011) or outright ignored them. Studies using KBV as a lens are much more common than studies specifically attempting to contribute

to a more comprehensive knowledge-based theory, and even within the latter there is variety in the approaches.

The problem may well reside within the nature of knowledge itself, as organisations and all their constituent parts down to individuals are in a constant state of exchanging information. Studies trying to advance a knowledge-based theory have approached the issue from different sides as firms are simultaneously struggling with creating new knowledge (Nahapiet & Ghoshal 1998; Nickerson & Zenger 2004), exploiting the knowledge they already have (Kogut & Zander 1993) and managing the influx of knowledge from multiple points (Grant 1996). As an outcome, there is no comprehensive understanding of the position of knowledge in all its iterations as a boundary factor for firms.

In 2004, Nickerson and Zenger concluded their review of the unsolved issues of hierarchy and predictive ability of the field stating: “*In summary, we do not yet have a knowledge-based theory of the firm*” (p. 618). Over a decade later, we are at very much the same point, as evidence does not show that a company hierarchical internalising model for utilising knowledge would be necessarily superior to knowledge exchange venues such as networks, partnerships, outsourcing, or triple-helix models.

However, even if the theory of the firm is lacking, KBV as a knowledge-based view is widely used and applied in different contexts. But if KBV does not explain the existence of the firm, what does it explain? Leaving aside the question of firm boundaries and market failure, KBV is mostly preoccupied why some firms fare better than others. The focus is on international firm performance and strategy, specifically in that firms that have the ability to acquire knowledge from multiple sources and then process it internally possess a resource that gives them a competitive advantage.

Therefore, KBV’s main assumptions bring it forth as a view on company internal processes and knowledge-bearing relationships. Firstly, while studies using KBV have taken many approaches to what aspect of the company or its knowledge processes are focused on, what these share is an acknowledgement of the interplay between the individual and group level knowledge. The difference between having knowledge and having the capability to use it is partly explained by the fact that knowledge is acquired by individuals, and while not everyone in the organisation needs to know everything, managers must have an overview of the knowledge resources available for them (Grant 1996).

Secondly, the individual identification of people with the firm’s social structures matters to their knowledge sharing activities (Regnér & Zander 2011). KBV

assumes a bounded rationality (Conner & Prahalad 1996; Grant 1996) and thus people have different knowledge and different perceptions about the firm's norms and values, which then affects their behaviour when it comes to knowledge sharing activities. Consequently, the activities people undertake based on their beliefs of what is expected of them as members of a social entity affects what knowledge is shared and to whom, which may lead to path dependence.

Finally, even though there is no unified definition of knowledge that would bind KBV research together, it is generally assumed that knowledge in organisations is found in both tacit (Polanyi 1967) and explicit forms. Through articulation and codification tacit knowledge can be made explicit and henceforth standardised in guides and templates (Håkanson 2007). The main assumptions of KBV are summarised in Table 2 and they form the basic assumptions that characterise this work as well.

Table 2. Common Assumptions in KBV Studies

Assumptions	References and Examples
Individual identification with social structures influences knowledge activities.	Kogut & Zander 1996; Regnér & Zander 2011
Bounded rationality means that individuals' knowledge (through the norms, beliefs and values they hold based on their knowledge) influences their behaviour, which in turn influences their knowledge activities, possibly leading to path dependence.	Conner & Prahalad 1996; Grant 1996
Knowledge activities have micro-foundations and there is an interplay between the micro and meso levels in utilising knowledge.	Argote & Ingram 2000; Felin & Hesterly 2009
Separation between having knowledge and the capability of being able to use knowledge for benefit.	Kogut & Zander 1992; 1993; 1996; Grant 1996
Tacit knowledge can be made explicit through articulation and explicit knowledge can be codified to standardise it.	Håkanson 2007; Valtakoski 2017

In line with these assumptions, this study assumes that knowledge is created and used in the individual and organisational level, but sometimes in ways that are difficult to observe. How people perceive the company's social structures influences their behaviour within them, and thus the ability to use knowledge created in external relationships in different international units is a global as much as a local issue.

2.2 Knowledge Transfer in an International Organisation

In daily activities, knowledge transfer occurs informally between individuals through relationships and formally through reporting. However, without a formal understanding and recognition of the transfer process, not all of the exchanged information ends up being used, resulting in underutilised knowledge stocks. A practical approach to assessing not only the capabilities of knowledge transfer but also the predetermined activities through which it can be influenced is therefore needed for the sake of improving firm operations and for advancing theory related to the KBV.

The vocabulary in knowledge literature is spattered with a multiplicity of terms denoting time (e.g. knowledge acquisition, creation, sourcing), relationship (e.g. knowledge exchange, sharing), or activity (e.g. knowledge utilisation, management, destruction). Knowledge transfer is perhaps the most widely used term that serves as an umbrella covering the whole process and the related activities within it, and is therefore used in this study to cover a wide array of activities. The next sub-chapters focus on the international issues of knowledge transfers.

2.2.1 Reverse Knowledge Transfer

Within the MNC network, the subsidiary holds an interesting dual role: It is simultaneously embedded in its external network of customers and partners, as well as holding a position in the internal network comprising of HQ and sister subsidiaries (Figueiredo 2011; Najafi-Tavani, Giroud & Sinkovics 2012). The relationship between these units is characterised by continuous knowledge flows, but concurrently also by tensions in transferring the knowledge (Mudambi & Navarra 2004; Ciabuschi, Dellestrand & Kappen 2012). Because both parties have their own aims, goals and agendas, as well as varying degrees of resources, knowledge exchanges are influenced by factors beyond the content of any one communiqué.

Because so much of the early literature on organisational knowledge transfer focused on hierarchical structures of HQ disseminating information to the subsidiary network, a separate phrase was coined for knowledge flows from subsidiary to HQ as reverse knowledge transfer. The literature on reverse knowledge transfer emphasises the importance of the subsidiary in the MNC network as they are in a prime position to acquire knowledge from the local markets and disseminate it to the organisation (Ambos, Ambos & Schlegelmilch

2006). The main focus has often been to challenge the traditional assumption of the HQ as the omnipotent, omniscient head of a subsidiary fleet.

Thus, the evolution of the literature on reverse knowledge transfer is closely connected with the discussion on organisational structures, hierarchies and power. These have taken various forms such as the direct effects of knowledge activities undertaken by subsidiaries (Mudambi & Navarra 2004; Ciabuschi, Dellestrand & Kappen 2012), subsidiary resources and their transferability (Mudambi, Pedersen & Andersson 2013), or HQ attention and involvement (Ciabuschi, Forsgren & Martin 2012; Dellestrand & Kappen 2012). Reviewing the stream of literature does, however, suggest that the role of customers is rarely included in the analysis, or is only included at the general level of external network embeddedness (e.g. Andersson, Forsgren & Holm 2002; Najafi-Tavani et al. 2015). While KBV is a commonly applied theoretical basis in the field, it seems that the focus has been more on the attributional elements of knowledge as a resource rather than on the micro-foundational or socio-communal elements that underlie viewing knowledge as a capability.

This is not to say that the importance of interpersonal networks has been neglected or ignored in these studies. Interpersonal communications and knowledge sharing have an established role in reverse knowledge transfers as informal networks and mechanisms that facilitate the exchange (Ghoshal, Korine & Szulanski 1994; Gupta & Govindarajan 2000). Furthermore, subsidiaries are more likely to exchange information with other members in the subsidiary network that are similar with them (Mäkelä, Kalla & Piekkari 2007) and if the actors share the same language (Marschan-Piekkari, Welch & Welch 1999). Interpersonal connections and their enablers such as language and proximity are therefore important network factors, but they have been rarely applied to customer relationships in the context of reverse knowledge transfer.

Yet new customer knowledge can only enter the company from external customer interactions and experiences, largely placing the burden of knowledge acquisition on the subsidiary (Andersson, Forsgren & Holm 2002). Subsidiaries vary in their activities and roles within the MNC network, and consequently individual subsidiaries have their own strategic aims and power bases to drive them, as extensively studied in the work of Birkinshaw and colleagues from the 1990's onwards (e.g. Birkinshaw & Morrison 1995; Birkinshaw 1997; Birkinshaw & Hood 1998; 2000; Birkinshaw, Hood & Jonsson 1998; Birkinshaw & Ridderstråle 1999; Frost, Birkinshaw & Ensign 2002). This body of work not only views the subsidiary as the focal unit of research, but maintains that the behaviour of a subsidiary is largely determined by the pressures it faces in its local market. Thus, the subsidiary

has an incentive to acquire knowledge to further its own performance in the market place, although this does not necessarily provide an impetus to transfer the knowledge to HQ.

2.2.2 HQ – Subsidiary Relationship as a Driver for Knowledge Transfer

While the subsidiary may drive for autonomy, and consequently the ability to make decisions that best fit its operations on a local level, its ability to reach it is influenced by the power base it has through its critical resources, its perceived legitimate role in the network, and its network position (Bouquet & Birkinshaw 2008a). The critical resources of a sales and marketing subsidiary, as these are most relevant for customer knowledge, consist of not only providing access to customer markets, which is easy to replicate, but of locally-embedded, tacit competencies, which are not available from other sources within the network and are acknowledged as valuable by the HQ (Rugman & Verbeke 2001). Therefore, the subsidiary has a higher stake in knowledge transfer when it can use the process to vie for autonomy through highlighting its value in the network as a controller of resources (power), performance enabler (legitimacy), and net knowledge provider (centrality).

Legitimacy is important to a subsidiary because when its actions are accepted as desirable and supportive of the corporate goals, it will have a stronger position to exert influence over the decisions regarding how those goals are reached (Mitchell, Agle & Wood 1997). Following a private agenda might result in higher profitability in the short term, but ultimately the subsidiary cannot go against the policies of the corporation and maintain legitimacy (Bouquet & Birkinshaw 2008a). In order to align with the HQ objectives, the subsidiary must be committed to shared goals. A committed subsidiary will find it in its interest to try to influence the decisions of the MNC due to rent seeking (Ciabuschi, Forsgren & Martin 2012), but if the commitment is lacking, it may seek only the power to be free of control and carry out a plan of obstructing all HQ mandates, systems and implementation efforts (Andersson, Forsgren & Holm 2007). Under such circumstances it would be unlikely that knowledge would be shared freely, implying that absorptive capacity relies not only on capabilities but willing engagement.

Controlling critical resources is also expected to gain subsidiaries influence (Pfeffer & Salancik 1978). When considering specifically a subsidiary sales organisation, the critical resource is knowledge about markets through sales and marketing activities. This knowledge leads to the subsidiary's ability to deliver results on organisational objectives and thus ensure survival, and to provide innovations and processes, which ensure long-term viability across the network

(Bouquet & Birkinshaw 2008a). The company is dependent on subsidiaries, which have embedded themselves successfully in external networks and use those relationships to gain competitive advantage for the firm (Andersson, Forsgren & Holm 2001; Forsgren, Holm & Johanson 1995). Thus they control a resource, which gives them power over the recipient units (Emerson 1962; Mudambi, Pedersen & Andersson 2013), although the ability to utilise that power may be found only in a reciprocal relationship.

Centrality in strategic networks is the third factor influencing the power balance between the HQ and subsidiary. The centrality approach combines resources and relationships. By themselves neither a valuable resource nor a good relationship is sufficient to generate a position of power for the subsidiary unit, but the combined impact of contributing resources for the common good and having the means through which to share them can improve the subsidiary's standing (Bouquet & Birkinshaw 2008a). This view assumes a proactive effort from the subsidiary.

The company will only benefit from the knowledge if it is able to access the subsidiary's knowledge resources (Ghoshal & Bartlett 1990). Because the HQ does not know where the most critical information resides or where new innovations are being developed, the value of the knowledge relies on the subsidiary's ability to transfer it, necessitating access to networks through which it can be transferred (Bouquet & Birkinshaw 2008a). A centrally placed unit will have multiple strong ties internally, resulting in an accelerated number of weak ties, through which innovations can be transferred widely (Granovetter 1973). A peripheral location, in contrast, may lead to isolation whereby knowledge is neither received nor transmitted (Monteiro, Arvidsson & Birkinshaw 2004).

Despite power dynamics, the subsidiary is, however, reliant on the resources of the HQ, and HQ attention has been recognised as a valuable resource in itself for the subsidiary (Bouquet & Birkinshaw 2008b; Ambos & Birkinshaw 2010). The HQ has in-built institutional power to ensure unity in goals within the network, and it can use incentives and support to promote behaviour it views as advantageous for those goals (Egelhoff 2010). The HQ holds a powerful position within the MNC network and, indeed, few MNCs operate purely as differentiated networks with no hierarchy (Ambos & Mahnke 2010). Decisions which transform the company operations on a level that requires extraordinary investments or significant changes in strategy are often relegated to the HQ. The subsidiary may wish to influence these decisions with information about what local customers value and how the value is best realised, but such knowledge must be assimilated in the HQ in order to be considered in the decision-making process.

Knowledge transfer in MNCs is therefore a complex process, especially as it pertains to customer knowledge which is a) location-bound, b) tacit, and c) difficult to convert to practices or strategies that can be exploited in synergy with other network actors. The subsidiary has a stake in knowledge transfer to further its own local ends, while the HQ requires knowledge to drive the goals of the entire corporation. How these two units interact and what their positions are vis-à-vis each other further explains the transfer of knowledge that occurs between them. Thus, using the research framework by Argote, McEvily and Reagans (2003), knowledge transfer is influenced by:

- properties of the knowledge,
- properties of the units, and
- properties of the relationships between units

These properties are discussed further under chapter 2.3 together with the concept of absorptive capacity.

2.3 Knowledge Transfer in Customer Relationships

Turning the focus on the customer relationship, the literature on knowledge transfer in a customer context is much more scattered than at the organisational level. Certainly customers and customer relationships have been under considerable study and literature streams on such varied areas as relationship marketing, corporate entrepreneurship and service, to name a few, have dedicated considerable effort to uncovering the different facets of how customers and company actors connect, form relationships and co-create value. This is in addition to the extensive body of work examining sales effectiveness in general. However, studies relating customers specifically to company knowledge transfers are less common. In this chapter I will look at customer knowledge transfer through the lens of social capital within the knowledge paradigm, as social capital has been traditionally closely associated with social interaction and exchange in a manner that is compatible with the basic KBV approach. The focal partners in the exchange are customers and KAMs, whose role is pivotal for information seeking.

2.3.1 Key Account Management as Organisational Communication

A key account is generally defined as a customer in a business-to-business market the vendor deems to be of strategic importance (McDonald, Millman & Rogers 1997). The key accounts may be the largest ones in terms of sales volumes or sales potential, but their attractiveness can also be due to their willingness to operate in a partnership or strength of relationship (Ryals & Rogers 2007). Key account

management as a process means awarding special attention to these customers through targeted marketing, tailored services and long-term, personal relationships (Tzempelikos & Gounaris 2013). The relationship is built generally with one focal person, the KAM, who heads the key account team and is pivotal in understanding what the customer needs so that the company can provide the right solutions.

The role of the KAM as an intelligence gatherer in the customer relationship is especially prominent in international business-to-business (B2B) settings, where most of the company actors never have the chance to meet the customer or otherwise be in direct contact with them. An understanding of what the customer needs and values is transmitted to the company by the KAM and through their interpretation of the situation (Blocker et al. 2012). The KAM has therefore a dual responsibility as they must, at the same time, behave proactively in seeking knowledge from the customer and act as an advocate for the customer internally in their own company (Richard & Jones 2009). The latter duty is realised only if the company infrastructures support the KAM's knowledge activities (Javalgi, Hall & Cavusgil 2014). The personal relationship between the KAM and the customer from the knowledge transfer point of view is therefore characterised by a recognised effort to uncover latent needs.

As such, KAMs act as boundary spanners, bridging the gap between the company internal and external environments. Boundary spanners are especially important for business solutions (Prior 2016). Solutions are generally regarded as bundles of products and/or services that are tailored to meet specific customer needs (Brady, Davies & Gann 2005; Nordin & Kowalkowski 2010; Hakanen 2014). Strictly speaking even a single product can be a solution if it is precisely what solves the problem the customer is having, but more often the impact of a solution comes from the unique combinations that offer some value for the customer greater than the constituent parts.

To be able to integrate with the customer's infrastructure to the degree of being able to optimise their existing equipment and capabilities and add value to them, the vendor must have an understanding of the customers' business rivalling that of the customer themselves (Miller et al. 2002). Observation or even interaction is unlikely to present such a deep-level of comprehension and therefore the KAM is expected to work in a partnership with the customer, having an emotional stake in the success of the customer's operations. The following quote from Napolitano (1997: 3) illustrates the crucial role and multifaceted competence of the KAM: *"Perhaps more than anyone in an organization, [K]AMs know their company's core skills and competencies and the people who can make it happen in every*

department – from research and development to manufacturing and marketing. Those who can put these people together with the same kind of people in customer organizations will be treasured resources.” The KAM must therefore possess not only technical expertise about the offer but processual expertise on how to make things happen, who to turn to, and what are the right networks to tap in to.

There are, however, possible tensions arising from the dual role of the KAM in between the customer and the vendor. Because the nature of business solutions requires such immersion in the customer environment to design a solution that can span product and geographical boundaries (Sengupta, Krapfel & Pusateri 2000), it also requires resources such as time, support and access. A lack of these elements can limit the KAMs ability to work effectively with the customer (Prior 2016). Furthermore, the need to petition for internal resources can lead to an increased workload and negative boundary spanning attitudes (Zablah et al. 2012), while lack of authority to fulfil the solutions internally requires constant effort to enact change (Ryals & Rogers 2007). In fact, in their interviews Ryals and Rogers (2007) found that accountability of short-term sales targets can actively work against the KAM’s personal relationship development and thus solutions sales, leaving the KAM to juggle incompatible expectations with an accompanying sense of frustration and disengagement.

The KAM role is thus subject to expectations from the selling organisation, but at least equally importantly from the customers. The customer perspective has only rarely been the main focus of research in key account management literature, barring such exceptions as McDonald, Millman and Rogers (1997), Pardo (1997), and Abratt and Kelly (2002), but the role of the customer has steadily grown in the closely related literature stream on solutions sales and servitisation. As both approaches focus on a closer integration between buyers and sellers, organisational change supporting a more customer-oriented sales approach, and understanding customer infrastructures as a whole rather than as spot-sales, there is sufficient convergence to consider these literature streams in parallel.

The kind of customers who prefer key account management programmes in general are large companies with multiple levels involved in the buying process, especially when the purchase is time consuming (Sharma 1997). Furthermore, the customer’s perception of how dedicated the KAM is to them and their issues influences the success of the key account management programme as a whole (Abratt & Kelly 2002), while the importance of the offer to the customer’s business relates to the time they are willing to invest on the relationship (Pardo 1997). Thus, the customer’s understanding of the KAM role shapes the relationship and

consequently the kind of access the KAM has to integrate with the customer environment and gain crucial knowledge about what the customer values.

What becomes a critical factor in the customer – KAM relationship is the customer's willingness to share information with the KAM and the KAM's ability to process it further (Hughes, Le Bon & Rapp 2013). Social capital is a tool that can be applied to relationships to understand the extent and manner in which interaction yields favourable outcomes to the parties. The next chapter discusses social capital as a factor of the customer – KAM relationship.

2.3.2 Partnership through Social Capital

Social capital has been found to influence the customer sales relationship in terms of the knowledge resources that can be acquired and used in the company. There is an expectation that the KAM is not only providing offers for the customer or receiving information, but that they can elicit privileged information or actions that can be used to further the relationship, and that they can also occasionally fail to provide value to some degree without losing the relationship.

Nahapiet and Ghoshal's (1998: 243) define the term social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit". There are, however, a variety of definitions for social capital. For example Woolcock (1998: 153) phrases the term as: "the information, trust, and norms of reciprocity inhering in one's social networks", while Pennar (1997: 154) submits it as: "the web of social relationships that influences individual behaviour and thereby affects economic growth". Adler and Kwon's (2002: 23) definition is: "Social capital is the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor", which also introduces the useful phrase goodwill. This implies simultaneously an intangible element as its occurrence is dependent on the situation and the personal relationships in question, and a more practical side. Like tangible capital, goodwill can be gained, used and, sometimes, lost.

Where these different definitions converge is on the acknowledgment that social capital is an intangible concept with multiple dimensions. These can be classified as structural (formal, such as job roles), relational (informal/personal), and cognitive (the ability of the network to share meanings, e.g. shared language and codes) (Granovetter 1992; Nahapiet & Ghoshal 1998). Behaviour in relationships

is therefore subject to underlying social mechanisms that are unobservable but can be leveraged for strategic gains and benefits (Hughes, Le Bon & Rapp 2013).

The relational dimension of social capital is represented by trust and perceived trustworthiness, and is influenced by structural and cognitive dimensions (Tsai and Ghoshal 1998: 466). This reinforces the earlier discussion that the customer – KAM relationship is subject to the formal KAM role within the vendor organisation, as well as the customer's perception of what the role is and how useful it is to them. At the micro-level routines as social structures emerge as people engage in activities repetitively (Sargis-Roussel, Belmondo & Deltour 2017), thus creating a shared understanding of normative behaviour for specific social situations and groups. People identify with the group and their understanding of what is expected from them as group members influences their behaviour and consequently the interpersonal relationships of the group (Payne et al. 2011). Thus, the structural, relational and cognitive dimensions of social capital can be seen as interactions between individuals and their context.

At the organisational level, firms require social capital in their relationships with key customers in order to gain relevant knowledge leading to product improvements, differentiation and bringing down sale costs (Yli-Renko, Autio & Sapienza 2001). However, Yli-Renko et al. (2001) in their conceptualisation replace trust with customer network ties and more specifically with the extent to which the company has access to the partner's resources. In essence, it is two sides of the same coin: trust as the foundation for a meaningful relationship, and the tangible benefits of utilising trust to gain critical information not available to other players.

Within the organisation, social capital is seen as a mechanism for knowledge transfer because the existence of shared values facilitates communications (Tsai 2001). However, the usefulness and existence of shared values has been contested on the basis that subsidiaries interact with their external environment in significant ways, which forms a barrier to shared values with HQ (Forsgren 2013). While support has been found to the correlation between shared vision and knowledge sharing readiness (e.g. Chow & Chan 2008; Hau, et al. 2013), there is also evidence to the contrary (e.g. Yang & Farn 2009), which necessitates not only a careful assessment of the applicability of shared vision, but also a separation between intra-organisational and inter-organisational relationships, which may have different characteristics (Li 2005).

Location-specific factors can also impose limitations on intra-organisational sharing, as geographic distance of the HQ means that the subsidiaries will likely find themselves having much more in common with their local partners with

whom they share a cultural background (Schulz 2001). Yet social capital can be a mechanism which facilitates knowledge transfer. Staber (2006) posits that social capital, when arising from methodological and appropriate relationship building, can overcome culture and lead to learning, commitment, new information and improvement as well as reducing ambiguity and opportunistic behaviour. Similarly Li, Barner-Rasmussen and Björkman (2007) present that social capital can facilitate knowledge transfer in situations where cultural prejudices or a not-invented-here attitude otherwise raise barriers.

Social capital is therefore a useful concept to understand what happens at the exchange level in business relationships. However, to come to a fuller understanding of how the personal level and organisational level interact in knowledge transfer incorporating the relational, structural and cognitive dimensions of the exchange relationships, we turn to absorptive capacity.

2.4 Absorptive Capacity as a Knowledge Transfer Process

After discussing knowledge transfer and the theoretical tradition that it relates to, a closer view on absorptive capacity as a vehicle for knowledge transfers is due. Absorptive capacity as a concept has been applied in many, often ill-defined, ways in research. In this study I aim to review the literature specifically as it pertains to the development of absorptive capacity as a process and how this can be applied in connecting interpersonal customer relationships with organisational dynamics.

2.4.1 Evolution of the Absorptive Capacity Process View

While the term predates this, the conception of absorptive capacity is generally awarded to Cohen and Levinthal's (1990) work focusing on the knowledge transfers and learning processes of firms engaging in R&D. This work proposed absorptive capacity essentially as an innovation: building on the prior knowledge the company possesses and embedded in its routines and processes aimed at recognising the value of external knowledge, assimilating it, and applying it for monetary gains. The higher the absorptive capacity, the authors argued, the more innovative the company.

Already this early work showed that two important network actors affect firm absorptive capacity: the external and internal. External information is generated by market forces to which the firm must be able to respond through recognising and acquiring it, while internal forces preclude simply purchasing the information

due to a need to assimilate the knowledge through routines and mechanisms (Cohen & Levintahl 1990). The role of networks subsequently gained greater attention, leading to the concept of relative absorptive capacity (Lane & Lubatkin 1998). Occurring in dyadic relationships between alliance partners, relative absorptive capacity is more useful in predicting the alliance partners' ability to learn from each other, rather than aimed at new innovations. This ability is founded on properties of the sharing units as well as the complementing fit of the firm's properties with regards to the partner (Lane & Lubatkin 1998). Thus, external knowledge is not always readily available to all market actors but exists in unique circumstances, and is dependent on relationship dynamics.

Conceptualisations of absorptive capacity as a process have extended the three-phase model of Cohen and Levinthal (1990) to span acquisition of knowledge, its assimilation, transformation, and, finally, exploitation in terms of commercial gains (Zahra & George 2002). In a reconceptualisation, Zahra and George (2002) titled the acquisition and assimilation phases jointly as potential absorptive capacity, as they represent the knowledge available for the company. However, to conclude the process and materialise the benefits there has to be a transformation where the knowledge is combined with existing assets, and consequently exploited in the customer relationship in the form of a value proposition. These latter two phases are known as realised absorptive capacity, as the concrete benefits are realised (Zahra & George 2002). The division to potential and realised absorptive capacity is useful in highlighting performance gaps in different phases of the process, or in the different parts of the organisation where the phases occur.

Much of the extant research has focused on the potential absorptive capacity (Volberda, Foss & Lyles 2010), possibly because it is easier for companies to recognise the problem of getting information from the external environment. Knowledge and learning in these studies is generally considered from the point of view of technological knowledge or expertise skills, where the boundary between external and internal environment is fairly clear. Curiously, even if the aim of KBV and absorptive capacity was to step outside the product and production focused paradigms of yore, much of the consequent research has doggedly focused on knowledge and processes specifically related to these areas. However, when the knowledge pertains to the much murkier depths of relationship-specific information, perceptions of value or expectations of service, the line between external and internal gets fuzzy and it is no longer enough to get the information. The value proposition then depends on what is done with the knowledge and how it is turned into actions.

While the process view suggested by Zahra & George (2002) has been criticised for abandoning the element of knowledge value recognition and introducing two separate phases for assimilation and transformation (Todorova & Durisin 2007), the idea of absorptive capacity as a process or as a set of processes underlying organisational learning (Lane, Koka & Pathak 2006; Sun & Anderson 2010) has been a useful application in multiple contexts. This view allows for considering the actors involved in the functioning of the process as individuals. While Cohen and Levinthal (1990) were sceptical of the possibilities of buying absorptive capacity, individuals joining the organisation with new knowledge and an entrepreneurial mind-set can take on a transformative role as change agents (Jones 2006). Furthermore, individuals act as boundary spanners linking the organisation with its outside environment collectively through routines and mechanisms, and through interactions (Matusik & Heeley 2005). The absorptive capacity process is therefore connecting the individual and the collective, the internal dynamic and the external influence.

2.4.2 Absorptive Capacity across International Locations

Absorptive capacity is influenced by the social context in which it occurs because all activities of knowledge transfer require social interaction as a prerequisite (Hotho et al. 2012). Social integration mechanisms have played an important role in the study of absorptive capacity in lowering knowledge transfer barriers (Zahra & George 2002), exposing relevant actors to the right knowledge (Enkel & Heil 2014), and enabling connections through shared values, norms and formal structures (Lewin, Massini & Peeters 2011; Schleimer & Pedersen 2014). This view on the social context in absorptive capacity focuses heavily on knowledge as a transferable good, grounding absorptive capacity to the realm of organisational learning affected by firm dynamics. Such dynamics can, however, be also considered in a wider context on an organisational level.

In the field of knowledge transfers, the subsidiary – HQ dynamic is a pertinent research area, as much information flows between these interconnected units. To understand the relationship between the two, properties of the units singly must be taken into account, as well as the networks in which they are embedded (Song, 2014). The subsidiary faces pressure due to its dual embeddedness in between the organisational imperative to carry out a specific mandate and market forces requiring actions sometimes to the contrary in order to be successful (Schleimer & Pedersen 2013). HQ can take an active role in enforcing normative integration to relieve these pressures, but this is not always the case (Schleimer & Pedersen 2014). Understanding on one hand the subsidiary's motivation to act on

knowledge activities (Song 2014), and on the other hand the power balance influencing the separate phases of absorptive capacity (Marabelli & Newell 2014) can shed light on variances in absorptive capacity based on the dyadic internal relationships between subsidiaries and HQs.

Central position in the internal network exposes the subsidiary to knowledge flows from across the organisation (Tsai 2001), including from different markets and cultural contexts adding layers to the information. The immediate external environment is no less complicated to decipher, and absorbing the complexity requires a continuous effort to acquire and assimilate knowledge in order to build and maintain a prior knowledge base. In stable knowledge environments companies can focus on exploitation, thereby completing the absorptive capacity process. However, turbulent environments require more efforts to reconfigure the knowledge base (Van den Bosch, Volberda & de Boer 1999).

Absorptive capacity has been adopted by scholars from many fields and it has proven a useful lens for various phenomena. While this variety speaks for the functionality of the concept, it has also rung alarm bells among researchers for fear of reification (Lane, Koka & Pathak 2006), lack of full utilisation (Volberda, Foss & Lyles 2010), and fragmentation across disciplines preventing the creation of a robust construct (Argote, McEvily & Reagans 2003). Table 3 shows a summary of past studies that have contributed to the process view of absorptive capacity (referred to as ACAP in table). Countless articles use absorptive capacity as a tool to explain their results, so the studies included in the summary are ones that have specifically focused on absorptive capacity on a conceptual level (therefore the abundance of conceptual papers in the list).

Table 3. Summary of Studies Conceptualising Absorptive Capacity as a Process

Author(s)	Research Focus	Theory	Sample	Key Findings or Arguments
Zahra & George 2002	ACAP as a knowledge transfer process	Dynamic Capability	Conceptual	Division to potential and realised ACAP based on internal knowledge transfer phases. Knowledge flows influenced by internal processes such as activation triggers or social integration mechanisms that enhance social exchange.
Jones 2006	Middle managers as ACAP change agents	Agency	Longitudinal	ACAP on an organisational level is dependant on the individual effectiveness of gatekeepers, boundary spanners and change agents. ACAP can thus be brought to the organisation by recruiting middle managers, that can be used to enact strategic change and divert from path dependency.
Lane et al. 2006	Critical review		Conceptual	ACAP as a construct has been widely used but lack of thorough evaluation means the usage has been haphazard and construct validity compromised. To redefine ACAP, the authors suggest a model connecting exploratory, exploitative and transformative learning, which provides a self-feeding, dynamic process model.
Todorova & Durisin 2007	Critical review of Zahra and George (2002)		Conceptual	A dynamic ACAP model should include learning and innovation, as well as incorporate feedback loops to enforce the changing nature of ACAP. Assimilation and transformation are neither sequential nor parallel but interactive constructs. However, different drivers may influence the different phases.
Easterby-Smith et al. 2008	ACAP as a process	Dynamic capability, organisational learning, knowledge management	3 cases, qualitative	Systemic and episodic power influence ACAP in external and internal relationships, thus different dynamics are involved in the separate phases and proactive involvement is required for knowledge transfer. Pushing knowledge across boundaries is affected by the nature of boundaries and boundary spanners.
Lewin, Massini & Peeters 2011	ACAP as organisational routines in external and internal relationships	Economic evolution	Conceptual	Definition of ACAP based on routines distances the literature from simple proxy measures. Routines can be divided to internal and external, allowing for consideration of network dynamics. Overarching the routines are socially enabling mechanisms of values and norms which allow for the necessary connections for knowledge transfer to take place.
Gebauer, Worch & Truffer 2012	The effect of ACAP on ability to change existing business model	KBV	2 cases, qualitative	ACAP influences strategic innovation through combinative capabilities and learning processes. Strategic innovativeness hindered when adherence to strategy or network position leads to path dependence. Combinative capabilities and exploratory learning enable innovation, while ACAP influences unlearning of superfluous models.

Author(s)	Research Focus	Theory	Sample	Key Findings or Arguments
Hotho et al. 2012	Micro-level antecedents from individuals to organisational learning	KBV	2 cases, qualitative	Social context influences ACAP in that transforming knowledge from individuals to organisational actions requires social interaction as a prerequisite. Organisational mechanisms (e.g. incentives or structure) can be used to enhance the willingness of individuals to transfer knowledge and thus improves ACAP.
Ebers & Maurer 2014	Internal and external relational embeddedness of boundary spanners	Relational view	N=218, quantitative	Potential and realised ACAP have different antecedents, borne from boundary spanners' dynamics within the organisation (internal relational embeddedness) and relationships with the outside world (external relational embeddedness)
Enkel & Heil 2014	Cross-industry innovation with knowledge transfer between partners	Social network analysis	N=215, quantitative	Firms transfer knowledge over networks of discrete organisations, and apply it in new ways in different contexts. Coordination antecedents (cross-functional interfaces, participation in decision making and job rotation) increase the company's ability to recognise, assimilate and maintain knowledge through potential ACAP.
Javalgi, Hall & Cavusgil 2014	Entrepreneurial sales performance	KBV	Conceptual	Proposed positive relationship for customer knowledge and sales, accounting for firm-level antecedents in gathering knowledge and external moderating influence.
Marabelli & Newell 2014	Practice perspective of knowledge and power	Practice perspective	Conceptual	Prior knowledge may affect knowledge absorption negatively and prevent radical innovations. ACAP as an on-going process, where the ways of transferring knowledge between the phases are influenced by the power of the transferring parties.
Schleimer & Pedersen 2014	HQ influence on subsidiary ACAP	KBV	N=213, quantitative	HQ can enhance subsidiary ACAP through social structures such as decentralisation and normative integration, dependent on the intensity of HQ effort.
Song 2014	Literature review of subsidiary ACAP		Conceptual	ACAP in a subsidiary-HQ relationship is a determinant of knowledge transfer but the connection is moderated by motivation. To understand subsidiary ACAP and knowledge transfer, characteristics and networks of the subsidiary must be taken into account.
Lichtenthaler 2016	Technological and market orientation	KBV	Conceptual	Firm innovation requires ACAP, which is influenced by technology orientation, responsive market orientation and proactive market orientation, subject to environment dynamics

The reason why it is important to understand absorptive capacity as a process specifically in international context is because there are effectively two interconnected relationships through which the knowledge is processed. We can consider these as loops: one with the external environment and the other internal between locations. Traditionally, absorptive capacity has been conceptualised only as a single loop where knowledge enters from the external environment and is then immediately processed. However, this single loop does not capture the intricacies of international organisational dynamics. If the knowledge must be transferred to another unit, typically HQ, in order to create a value proposition, then the company cannot be considered a monolith in which processes occur automatically regardless of location or organisational level.

If we account for the existence of the HQ and the influence it exerts on the value creation cycle, it is possible to conceptualise absorptive capacity as a process that occurs concurrently but separately in the subsidiary and the HQ. In this model the subsidiary acquires knowledge from the customer, and subsequently the HQ acquires knowledge from the subsidiary. This single loop model, however, does not show the different structures and mechanisms that connect or separate the units. Therefore, a double loop model is suggested in this study where the customer, subsidiary actors and HQ actors all belong to the same knowledge absorption continuum, subject to different forces at the different phases. Table 4 shows a visual comparison between the single and proposed double loop.

Table 4. Single and Double Loop Absorptive Capacity from Subsidiary and HQ Perspective

	Subsidiary	HQ
Single Loop	<p>Acquisition from customer engagements</p> <p>Assimilation within the unit</p> <p>Transformation to new capabilities locally</p> <p>Exploitation in sales</p>	<p>Acquisition from subsidiary</p> <p>Assimilation within the unit</p> <p>Transformation to new capabilities in HQ</p> <p>Exploitation not realised</p>
Double Loop	<p>Acquisition from customer engagements</p> <p>Assimilation both within the unit and influencing HQ</p> <p>Transformation resources from HQ implemented locally</p> <p>Exploitation in customer engagements</p>	<p>Acquisition from subsidiary</p> <p>Assimilation in co-operation with subsidiary inputs</p> <p>Transformation to processes across the network</p> <p>Exploitation through subsidiary</p>

The double loop shows that acquisition occurs at the subsidiary level in customer engagements, but assimilation is a process that takes place in the relationship between the subsidiary and HQ. The HQ input influences what kind of knowledge the subsidiary considers valuable, while the subsidiary's power, legitimacy and centrality in networks influences the HQ's possibilities and motivation to receive it.

Transformation in the double loop model is also a co-operative process because transformation of knowledge has a tangible dimension. Knowledge about customers – what they value, what their business challenges are, how to grow their business or enhance their operations – can be transformed into value propositions in terms of e.g. processes, products and/or services. This transformation, however, may require investments and authorisation from the HQ, as well as know-how and buy-in from the subsidiary, where exploitation occurs in customer engagements. Value propositions look beyond an individual sale, and therefore the dynamic nature of absorptive capacity can be further enforced as providing customers with value rather than goods is conducive for a deeper relationship, leading to more profound customer knowledge.

2.4.3 Absorptive Capacity as a Vehicle for Knowledge Transfer

Following the double loop model, the properties of knowledge transfer (of knowledge, of unit, and of the relationship between the units) as presented by Argote, McEvily and Reagans (2003) can be mapped on all levels with the different phases of absorptive capacity, as in Table 5.

Table 5. Properties of Knowledge Transfer in Relation to the Phases of Absorptive Capacity

Transfer Phases	Properties of Knowledge	Properties of the Unit	Properties of the Relationship between the Units
Acquisition	Tacit or codified knowledge	KAM role, KAM – customer relationship length and strength, subsidiary role and local embeddedness	Subsidiary autonomy
Assimilation	Knowledge stickiness	Internal networks, reporting tools, management legitimacy, issue selling ability	Subsidiary power, legitimacy and centrality in networks
Transformation	Complex process knowledge	Change management	HQ hierarchy, collaboration channels
Exploitation	Customer-centric and business critical knowledge	Selling and marketing ability	Support

Properties of knowledge that have a relevance to knowledge transfer in the acquisition phase are related to the customer engagement. While companies employ a variety of customer relationship management tools to align with their customers' strategies in order to reap the benefits of a long-standing relationship, many such initiatives fail to deliver, and may even cause reputational damage internally and externally (Rigby, Reichheld & Scheffer 2002). Key account management, however, relies on building long-term personal relationships, and as the parties develop trust and familiarity, complex knowledge is acquired via the relationship (Hakanen 2014). The type of knowledge is therefore relevant for the acquisition phase, but it also has an impact for assimilation.

Assimilation of knowledge whereby the knowledge is circulated in the organisation and adopted into existing routines and processes is affected by the knowledge being, by its very nature, "sticky" (Szulanski 2000). This stickiness can have an

effect on transformation as well, especially if the transformation has been largely appropriated by the HQ and the knowledge assimilation results in complex process-knowledge, which is more difficult to implement than codified guidelines (Montazemi et al. 2012).

Exploitation of knowledge in terms of value propositions in customer engagements is complicated by the need to have personalised knowledge about the customer, their business, the relationship, and added value of the company and solution for them (Berghman, Matthyssens & Vandenbempt 2006). Value offers can lead to long-term customer relationships when there is an active dialogue with the company representative and the customer, exchanging critical information about the value-in-use of the company's solution (Aarikka-Stenroos & Jaakkola 2012). Thus, the nature of the knowledge in exploitation is customer-centric and business critical.

Properties of the sender (an individual KAM) and unit influence knowledge acquisition via the overall competence framework of the company. The unit must have the ability to process knowledge from multiple sources quickly and efficiently to support the customer relationship (Hakanen 2014). Furthermore, the unit's strategic role defined locally, globally or through its specialised knowledge contributions will affect the kind of knowledge it acquires (Birkinshaw & Morrison 1995). This is necessarily intertwined with the level of the subsidiary's local embeddedness, as rare, inimitable and non-substitutable resources can be leveraged from external networks, thus affecting knowledge acquisition and, through the overall MNC competence development, also the subsidiary's strategic role evolution (Andersson, Forsgren & Holm 2002).

Organisational factors can either mitigate or exacerbate the stickiness effect of knowledge (Montazemi et al. 2012), and therefore the existing knowledge transfer processes influence the receiving unit's ability to assimilate it. A subsidiary unit must also contain the ability to engage in issue-selling activities, which differentiate it from other organisational units vying for resources from HQ (Gammelgaard 2009). While this ability can be on the level of the organisation, local management is most likely to have relevant contacts to HQ, and therefore the managing director's personal ability and charisma is likely to make an impact on knowledge assimilation (Bouquet & Birkinshaw 2008a). Thus, a wide range of abilities is required at the unit level to facilitate overcoming knowledge stickiness.

Transformation of knowledge requires the unit to be able to manage change, be it processes, attitudes, structures or products, in order to be able to offer the customer a concrete solution that fits their needs (Hakanen 2014). These solutions must then be sold to the customers, which enacts a change in the role of sales

towards an integrated, strategically focused part of business (Storbacka, Polsa & Sääksjärvi 2011). Therefore, the structure of the subsidiary has implications on the exploitation of knowledge.

Properties of the relationships between the units have a bearing on knowledge acquisition because the level of autonomy the subsidiary yields when deciding its engagement activities in external relationships is determined in co-operation with the HQ. The objectives of the HQ for the subsidiary in terms of exploring or exploiting the market may be the primary determinants (Wang & Suh 2009), or the subsidiary may engage in micro-political bargaining to affect the level independently (Dörrenbächer & Gammelgaard 2006; 2011).

Assimilation of knowledge at the corporate level requires the subsidiary to have influencing power to push issues through, legitimacy to be acknowledged, and a central position in the internal network to have access to relevant knowledge recipients (Bouquet & Birkinshaw 2008a; Gammelgaard 2009). These factors evolve in the relationship between the units as the subsidiary aims to improve its position, while the HQ tries to balance the good of the local performance with the sometimes conflicting needs of the corporate goals, as well as the HQ's own position of authority (Egelhoff 2010; Foss, Foss & Nell 2012). However, even with a concerted effort the HQ may find it difficult to assimilate knowledge from the subsidiary because it operates in a very different cultural, geographical or institutional context (Kostova & Zaheer 1999). Thus, the relationship between the units, and hence knowledge assimilation, is influenced by the context in which the parties operate.

Transformation of knowledge into value offerings occurs as a consequence of both parties understanding the benefits of the change. The institutional authority of the HQ means that in some cases it can push the change processes through to the subsidiary without consultation; in other cases this may not be possible, especially if the transformation is complex, requires transaction specific skills and consists of tacit knowledge. This is generally the case with marketing strategies, and can thus be assumed to apply to other customer engaging transformation processes (Schleimer, Coote & Riege 2014). As such, the HQ hierarchical position in relation to the subsidiary and the collaboration between the two are the primary relationship-specific aspects of knowledge transformation.

Exploitation of knowledge takes place mainly in the subsidiary in customer engagements. However, the HQ-subsidiary relationship can influence the level of resources available for support, and thus HQ attention can be a powerful performance factor (Ambos & Birkinshaw 2010). Thus, in the case of transferring customer knowledge from sales and marketing subsidiaries the knowledge itself is

tacit and complex with a tendency to stick with the knowledge owner. The unit must be locally embedded to gain access to knowledge, and contain in-house abilities to push the knowledge forward within an integrated structure. Finally, the relationship between the HQ and subsidiary should allow for sufficient autonomy for the subsidiary to develop in line with the local knowledge, while maintaining collaborative links that enable the subsidiary to leverage its resources in order to gain HQ support. This concludes chapter 2 review on HQ-subsidiary relationships. In the next chapter I will look into servitisation and the relationship with value.

3 SERUITISATION IN VALUE CREATING RELATIONSHIPS

In this chapter I will discuss servitisation as a concept and how it has evolved, especially over the past few years with increasing speed and volume. I will also pay closer attention to how servitisation manifests in organisational structures and what the connection is with value in customer relationships.

3.1 Concepts of Servitisation

Servitisation or the addition of services to existing product offers is used increasingly by manufacturing companies as a means for increased profitability (Jacob & Ulaga 2008) or for blocking out competition (Oliva & Kallenberg 2003). As the role of services in traditionally product-dominated industries such as manufacturing continue to grow in the realm of business as well as in scholarly pursuits, the issues in offering them become more evident. Services are complicated and difficult to sell because they require changes in the fundamental structures and processes of the firm and mind-sets of individuals working there (Oliva & Kallenberg 2003; Brady, Davies & Gann 2005; Oliva, Gebauer & Brann 2012). Thus, they often necessitate changes in the business model (Davies et al. 2007), while the potential profits are not readily available (Visnjic Kastalli & Van Looy 2013). Furthermore, in an international environment customers and decision-makers are unlikely to meet and may be separated by culture, language and physical distance, leading to an organisational lack of knowledge about customers' needs. This makes it all the more challenging to provide them with services that ultimately create value and thus justify the investments made on providing them.

Selling services can take varied forms in companies and there is no predetermined linear path from product-orientation to provision of solutions (Kowalkowski et al. 2015). Much of that complexity is reflected in the relationship approach based on customer value because it requires balancing the customer's unique situation and market context with the internal capabilities and value propositions of the company (Ferreira et al. 2013; Helander & Möller 2007). Accounting for both customer and company internal stakeholders already provides multiple actors with viewpoints that may or may not fully align. The customer's perception of value may differ radically from that of the company; and while the salesperson responsible for maintaining and growing the customer relationship may be primarily focused on profitability of the individual sale, management might be more concerned about the degree unique solutions can be made available cost-effectively across the company's international network and customer-base.

In a review of servitisation literature, Brax and Visintin (2017) found that servitisation studies in the manufacturing industry generally take one of three approaches to building models: they look at the end state after servitisation, or at the process either as a gradual transition or stepwise progression. This finding is interesting because it shows that while scholars have taken multiple different approaches to study servitisation, the underlying problem have generally been defined in terms of trying to understand what actually happens in the organisation: What processes, practices and routines change, in what order, and to what ends.

One of the most influential works in the field is Oliva and Kallenberg's (2003) study focusing on servicing installed base. This study highlights many of the key issues that later research has expanded upon from organisational support processes to network relationships required to change the product portfolio and the ability of the company to offer it. The study conceptualises service mainly in terms of break-fix or maintenance, and servitisation as a process with a predetermined aim to increase and expand the service offer. Services are therefore seen as a type of product that can be formulated within the company but selling, implementing and delivering them presents organisational challenges.

There is an appealing pragmatism to the approach and from the point of view of operational efficiency there is a recognised need to look inwards to the company processes (Green Davies & Ng 2017). However, a concerted move towards greater service provision may require knowledge and competence not readily available in-house and the company external network can become a source of competitive advantage (Davies, Brady & Hobday 2007; Bastl et al. 2012). The combination of upstream and downstream activities into solutions offers can include even competitors as third parties (Raddats & Easingwood 2010), or service networks can consist of different actors in the value chain with suppliers, partners and complementary product manufacturers (Gebauer, Paiola & Saccani 2013). Servitisation is therefore not only an inward focused activity but it opens the focal company up to new kinds of partnerships and value configurations.

As companies become more servitised, the expectation is that they start operating in a more customer-focused manner. This same attitude is reflected in their dealings with their own supply network, where the focal company takes the part of the customer (Raddats & Easingwood 2010). In this way servitisation can affect the whole network of actors, sending ripple effects in terms of what the focal company requires and how it interacts with its supply network. The networks must therefore be managed to provide integrated solutions in a continuous back and forth between multiple partners who can provide valuable insights, capabilities or offers to complement or support the company (Windahl & Lakemond 2006). This

indicates that the servitisation process is never truly over and that the combination and recombination with the external network is a continuous effort to meet the changing customer needs.

The most obvious partnership affected by servitisation is with the customer. A long-term customer relationship is often viewed as the desirable end-state of servitisation (Oliva & Kallenberg 2003). The value creation view on solutions begins with the customer need, and the company's need to be aware of what that is and how offers are retrofitted to meet it (Brady, Davies & Gann 2005). This approach is, however, more likely to occur in a company that has already begun or completed the servitisation process, as this approach may require extensive tailoring, availability of expertise, and additional resources, all of which are typically made available through servitisation.

From a narrative perspective, the story of how servitisation unfolds is generally told from the company perspective where the customer relationship or customer value and ensuing satisfaction is the happy end (Luoto, Brax & Kohtamäki 2016). Much rarer are the stories (e.g. Neu & Brown 2005) where the customer actively influences how servitisation occurs, what shape it takes or what activities should be included. This is in stark contrast to studies on solutions where co-operation and tailoring according to customer requirements is the default expectation at every stage of the solution delivery (Tuli, Kohli & Bharadwaj 2007). The end results of how the solution looks like is entirely dependent on the partnership and knowledge transfer between the vendor and the customer, while servitisation outcome is much more likely to be considered a result of the company's internal processes and objectives, and whether these can be successfully reached or not.

Where customer takes a role in the servitisation process most clearly is in the initiating phase and acknowledgement that companies may at least partly begin the servitisation process to respond to customer demand for more services (Oliva & Kallenberg 2003). However, even this type of customer proactivity is often sidelined. While articles on servitisation often begin with a cursory remark as to why companies may wish to do so, the initiatives being customer driven are rarely included in these lists. Table 6 provides a summary of servitisation motivations often mentioned in articles. While no means an exhaustive list of all servitisation literature (for recent review articles see e.g. Lightfoot, Baines & Smart 2013; Brax & Visintin 2017), what is seen is that servitisation motivations are only rarely considered to be customer led and or based on expressed customer requests.

Table 6. Commonly Cited Motivations for Servitisation

Motivation for Servitisation	Source
Financial benefits (new revenue streams, long-term contract profitability, increased sales)	Oliva & Kallenberg 2003; Jacob & Ulaga 2008; Nordin & Kowalkowski 2010; Raddats & Easingwood 2010; Gebauer & Kowalkowski 2012; Kohtamäki et al. 2013; Parida et al. 2014; Story et al. 2016
Operational efficiency in responding to customer needs	Mathieu 2001; Gebauer & Kowalkowski 2012; Paiola et al. 2013; Powers, Sheng & Li 2016
Blocking competition	Tuli, Kohli & Bharadwaj 2007; Raddats & Easingwood 2010; Parida et al. 2014; Neto, Pereira & Borchardt 2015
Staying competitive in cost-based markets	Miller et al. 2002; Oliva & Kallenberg 2003; Neely 2008; Kuczka & Gebauer 2011; Paiola et al. 2013; Neto, Pereira & Borchardt 2015;
Competitive advantage	Helander & Möller 2008; Jacob & Ulaga 2008; Nordin & Kowalkowski 2010; Gebauer et al. 2012; Kohtamäki et al. 2013; Kuijken, Gemser & Wijnberg 2016
Customer demand	Miller et al. 2002; Oliva & Kallenberg 2003; Davies, Brady & Hobday 2007; Raddats & Easingwood 2010; Kujala et al. 2011; Kohtamäki et al. 2013

What is listed here under customer demand also includes mentions of customers wanting to outsource their non-core operations and demand more service from the supplier. This is not entirely in line with the notion of servitisation driving for partnership or co-creation of value, but it is not mutually exclusive of it. Financial considerations and somewhat vague mentions of keeping competitive seem to dominate the list of why companies might want to begin servitisation. This undoubtedly reflects the company's perception of reality and the reasons why they initiate it; after all, a company would hardly begin a costly, time-consuming servitisation project if there were no economic incentives for it, if successful (Kowalkowski et al. 2015).

However, because research is often focused on the company and interviews or surveys are targeted at company managers, paradigmatic assumptions may favour the managerial view and not take a critical view on other possible explanations (Luoto, Brax & Kohtamäki 2016). Customers may feel differently about the initiation of servitisation processes, especially if they have been active in pushing

for more service and more co-operation. In such cases they may feel that the company is reacting to their demands rather than proactively seeking opportunities. Such a customer-oriented approach to service development may even be harmful for the long-term radical service development of the company (Hillebrand, Kemp & Nijssen 2011). Thus, more critical work in line with Tronvoll et al. (2011), Kowalkowski et al. (2012), and Kowalkowski et al. (2015) on customers' influence on servitisation motives at the early stage would enhance understanding of customer engagement beyond ensuing value co-creation (Grönroos & Ravald 2011) and new service development processes (Matthing, Sanden & Edvardsson 2004).

During the servitisation process, customer reluctance to engage in a new type of business activity or relationship can also be considered a barrier for the successful implementation of the transition (Lightfoot, Baines & Smart 2013). In this study I, however, employ the view that customers' response, whether negative or positive, to servitisation initiatives is not a sign of failure or success but part of a natural dialogue that shapes the servitisation process in its further iterations in the partnership.

Servitisation is therefore an organisational overhaul that reaches out through internal and external relationships to different areas of the business and the way business is done. In the following chapters I will discuss the structural and relationship implications of servitisation in greater detail.

3.2 Approach to Value in Service as a Logic

Parasuraman (1998: 309-310) delineates between services as a type of intangible products and service as general level customer service that accompanies the sale of goods, tangible or intangible. This kind of division is still evident in service literature where subtle use of the plural typically denotes service items that can be billed, sold, bundled, reported, delivered and/or tracked through various means. The singular service, however, has grown to a more comprehensive concept, which generally entails some level of value to the receiver of said service.

Service and absorptive capacity possess processual elements and are operating in parallel in the organisation (Jimenez, Angelov & Rao 2012; Chang, Chen & Lin 2014). Both contain external and internal dimensions, as well as the requirement of human agency at the individual level and organisational mechanisms at the organisational level. In service literature these elements are largely conceptualised through the value creation process where value occurring activities take place in the company sphere, in the interactions between the company and the customer,

and in the customer sphere (Grönroos & Ravald 2011). Absorptive capacity, on the other hand, is a relationship-driven concept where knowledge is exchanged in customer relationships and imported into the company knowledge base (Lewin, Massini & Peeters 2011).

Where the two concepts are distinctly different is in their aims of what they attempt to explain. Absorptive capacity emerges from the innovation literature, and as an off-shoot of the resource-based view it focuses on firm capabilities as resources that provide firm-specific competitive advantage (Volberda, Foss & Lyles 2010). It is therefore not unusual to find quantitative studies that use R&D as a proxy for absorptive capacity, as in Cohen and Levinthal (1990), while simultaneously the wider literature field may paint it as a capability, a dynamic capability or a process. Absorptive capacity is often used to explain differences in firm performance while service explains why firms operate the way they do in relation to performance (see e.g. Neely 2008; Oliva, Gebauer & Brann 2012).

Service as a value offer is divided in two main approaches, service-dominant logic (SDL) and service logic. It is worth noting that while servitisation is mainly discussed in the area of industrial marketing and service operations management (Kamp & Parry 2017), service logic and SDL are more prominent in the traditional marketing discipline and with a focus more on customer connection with the company. SDL as envisioned originally by Vargo and Lusch (2004) and further expanded in their later works (Vargo & Lusch, 2008; 2016) is the most all-encompassing approach considering service the primary task of companies and transcending business activities. Service logic as championed in the extensive body of work by Grönroos (e.g. Grönroos 1989; 2006; 2008; 2009; 2011; 2012; 2014; Ravald & Grönroos 1996; Grönroos & Helle 2010; Grönroos & Ravald 2011; Grönroos & Voima 2013) focuses more on companies' activities and a voluntary mind-set. Rather than seeing service as the fundamental basis for business, it views it as an offer that companies can choose to embrace or discard throughout their operations.

While service logic chronologically predates SDL, the latter has swiftly gained a prominent status and been applied in different fields of study, indicating versatility of the concept (Ballantyne, Williams & Aitken 2011). The underlying idea behind SDL is that all exchange between vendors and customer are exchanges of service, i.e. knowledge and skills (Vargo & Lusch 2004). The vendor offers value propositions but value is always co-created with the customer either directly through interaction or indirectly through the utilisation of goods. From the point of view of servitisation the important distinction is that companies do not move to SDL by adding services to their portfolio but by involving their customers in value

creation, designing their offers to fit the customer need, and providing solutions (Kowalkowski 2010). For a manufacturing company this might mean fundamental changes in the customer front line operations, but also in the back office in terms of financing options, contractual obligations, deliveries and other functions that are instrumental in acting in a way that supports the customer's value creation activities.

In contrast, Grönroos and Gummerus (2014) reviewed some of the main similarities and differences between service logic and SDL and found that while many of the foundations were very similar, there were differences in the definitions and usage of value and related concepts. Service logic states that there are multiple actors that all contribute to the customer's value creation process and they take place in the provider sphere, the customer sphere, and the interaction between the two (Grönroos & Voima 2013). Value co-creation therefore relates specifically to the interaction where parties do something together (Grönroos 2012). Service logic also delves deeper in the provider sphere and provides a starting point in understanding the vendor's value generating activities through design, development, manufacturing and delivery (Grönroos 2011).

In this study I refer to the service logic approach as the ultimate end-state of servitisation, because it is more befitting with the objectives of the research. While SDL and service logic share many of the foundational premises, service logic tends to separate more between the company's actions even at the functional level, and its desired outcomes. By offering a sequential process for value creation, service logic enables studying the phases of the process as individual pieces of a puzzle, subject to different dynamics and liable to encounter a distinct set of problems or issues. Furthermore, the focus in service logic is more on the structures, processes and actions of the company, rather than the value creating activities of the customer in their own environment, which is in line with the aims of the study. Therefore, references to service-orientation or value creation in this study follow the conceptualisations of service logic literature with the proviso that the two are mutually supportive.

A closely related more recent business logic dealing with service and customer issues is the customer-dominant logic (CDL), outlined by Heinonen and Strandvik (2015). As the research is focused on customer knowledge and developing new services based on customer input, CDL has some obvious commonalities. However, much of CDL's premise is based on customers embedding service into their own processes whereas this research is focused on the provider's perspective and processes. While it is very important for companies to consider their customers' service ecosystems and find a good fit with their service offer, the way

companies are structured and managed also contributes largely to their success in being able to provide and deliver said offer. Service logic is more appropriate for the purposes of this particular study as it is more provider-focused than CDL.

3.3 Structural Implications of Servitisation for Value Creation

Servitisation in a manufacturing company as a change process towards a more customer-oriented business model including – but not limited to – the addition of services and solutions to its value proposition (Kowalkowski et al. 2017) depends on the company's ability to partner with a customer to understand their needs, and to organise operations to create value with the customers. I will first discuss the structural requirements of aligning frontline sales and back office for service provision. To understand this, however, it is necessary to first consider what service is, how it connects with the concept of absorptive capacity as the other main concept of this study, and what would be the assumed end-state if a company were to commit to a fully-fledged service-orientation.

3.3.1 Servitisation as Organisational Change

While the view on service as a logic relates to the mind-set of companies being service-oriented and prioritising customer value over sales of goods, independently, if often concurrently, servitisation in companies can also just take the form of adding services to the portfolio (Kowalkowski 2010). In either case, the manufacturing company has to undergo a transformation that includes both tangible changes (e.g. IT systems, contract terms) and intangible (e.g. how employees understand their role and the norms and values of the company).

Unfortunately, no roadmap exists to catalogue all the things that need to change for a company to be able to sell services successfully, despite the fact that this poses one of the main challenges for companies looking to embark on servitisation (Barquet et al. 2013). Servitisation is highly context-bound and may take different forms based on the company's own starting point, end goals, stakeholder requirements, customer input or even serendipity. Gebauer, Fleisch and Friedli (2005) coined the term service paradox for when companies started adding services in their portfolio in a bid to increase revenues and create new revenue streams, but the profits failed to materialise at an expected rate. They found that this failure resulted from managerial resistance and scepticism about the return on investment for services, because service was not connected to the customer value propositions on an organisational level.

Thus, we know that change must take place in the wider organisation in order to yield results. We can also surmise that a servitisation process initiated from the basis of creating new revenue streams without considering customer value or consulting with customers is likely to lead to different outcomes than servitisation motivated by being better at responding to customers. Employees' perception of the company's service climate in terms of policies and normative behaviour influences their behaviour (Bowen & Schneider 2014). If even the managers do not express a full buy-in to the service concept or champion it, the shop-floor is unlikely to pick it up either.

Furthermore, what the company offers and how it operates should be aligned for services. Reinartz and Ulaga (2008) identified a four-step transformation initiative for selling services profitably from reviewing internal operations for existing service bases, systematising back office, re-training front line sales people, and committing to solving customer problems. While each of these phases comes with its own challenges and multiple change processes, the implication is that there should be alignment in operations to find and exploit the opportunities already present in the existing customer relationships. This can vary from spotting the services the company is already doing without charging and either starting to charge for them, or to leverage them for value, to rewarding sales people for behaving in a customer oriented way and fostering relationships.

The existing relationships can also be enhanced through vertical integration (Wise & Baumgartner 1999). If a manufacturing company has strong production capabilities, these can be built on to operate and maintain the products as well, therefore taking on a larger share of the customer's business and locking them in a relationship that can be used to gain more knowledge about them (Davies, Brady & Hobday 2007). Integrated solutions increase in complexity (Nordin, Lindahl & Brege 2013), which in turn require capabilities which "facilitate the integration of products and services, as well as to develop, sell and deliver services" (Paiola et al. 2013: 391). That is to say, it is necessary to develop capabilities that cover a wide range of value generating activities, which in a traditional manufacturing company may reside in different areas of the business.

Perhaps the most explicit change model is presented by Oliva and Kallenberg (2003) moving through stages of consolidating services, entering the installed base service market, expanding the offer and finally taking over customer operations. This model assumes a step-wise progression from products to services. A similar approach has been later utilised by Wise and Baumgartner (1999) and Baines et al. (2009), but it has also faced criticism. The unidirectional assumption does not leave space for other options firms might choose or be forced to take (Finne, Brax

& Holmström 2013), even though installed base is not the only industrial offer manufacturing companies operate with (Storbacka et al. 2013). In addition, firms may try out multiple ways to become more service oriented (Windahl & Lakemond 2010) and thus linear progression towards a pre-determined or even desired outcome is not given (Kowalkowski et al. 2015).

In a review article of servitisation from an organisation change management point of view, Baines et al. (2017) state that there is a dearth of studies focusing on the change process and elements thereof. This may be because the phenomenon takes place in such varied settings that an exhaustive conceptualisation would entail too many contextual variables. However, an overview emerges from the literature that organisational change relating to servitisation requires wide-scale buy-in from employees on all levels, alignment of operations, training on an individual level and flexibility. From such basis, I shall next look at the structural implications of servitisation in the business model.

3.3.2 Servitisation in Business Model

It is commonly accepted that servitisation leads to changes in the servitising company's business model or, in extreme cases, to a fully-fledged service business model (Forkmann et al 2017). As a concept, business model is still fairly new. However, from the beginning of the 1990's it quickly proliferated in articles and business vernacular and has since become a staple (Shafer, Smith & Linder 2005). At a general level, a business model describes the value generating activities of a company (Teece 2010) and thus creates a link between business strategy and operations (Mäkinen & Seppänen 2007). It can be applied in either product-oriented or service-oriented firms to detail what the company does and for whom in order to make profit.

Making the business model explicit helps companies to map out what activities support their long-term strategic goals (Barquet et al. 2013). Amit and Zott (2012) offer iTunes as an example from a fast-moving consumer technology industry, where a new product innovation may wipe out the existing technology but a business model based on people subscribing to a service has created a customer base that will not be easily poached. However, understanding business models in line with value co-creation is helpful also in B2B industries (Nenonen & Storbacka 2010), where they can be used to justify for example a move to contract business over transactional, R&D investments, or personnel or recruitment policies, depending on what the company wants to achieve and what kinds of actions it believes will help keep it competitive.

Business models are also a useful tool for understanding strategic innovation. Where product and service innovations reinforce the existing way of doing business, strategic or business model innovations challenge not only how the company sees the market but how the whole industry does (Gebauer, Worch & Truffer 2012). Innovation is an inherently outward reaching activity requiring the absorption of external knowledge into the firm operations (Lichtenthaler 2009), and business models capture the structure of boundary-spanning activities, blurring the lines between what is considered the firm's external and internal limits (Zott & Amit 2008). Hence, a market can change from a static recipient of offers to a dynamic actor.

Firms co-create markets by deploying resources and generating value creating activities (Lusch, Vargo & Tanniru 2010). Thus, a market can be seen as a collection of value creating elements combined and recombined in a way that suits the needs of multiple stakeholders in a network (Storbacka & Nenonen 2011). The concept of value is intrinsically linked with the concept of a business model, so that the focus is moved from understanding what the company does for the market to how is the company a part of the value creation processes of the market actors (Storbacka et al. 2012). Relating this to the earlier example of iTunes, Apple recognised they were not selling people technology; rather they were enabling people to listen to music.

At first glance there is a natural link between servitisation and business models: the former aims at creating more customer value, the latter is an outline of the value generating architecture of a company. Moreover, the business model concept has flourished concurrently with increasing focus on alternative approaches to business, of which servitisation in manufacturing companies is a prominent one. The roots of the business model concept can be found in the field of entrepreneurship and especially setting up new types of business ventures online, necessitating new approaches to markets (Ehret, Kahyap & Wirtz 2013). This kind of disruptive thinking of how else can business be conducted has been inspirational to established manufacturers as well and led to new ideas about traditional industrial markets.

From this perspective, servitisation in company structures means understanding the value generating network activities of the company: its key partners, resources, activities and channels, and the customer's processes and environment in which they operate (Barquet et al. 2013). For example legislative or infrastructure changes in the customer's country may influence the level of support a group of customers require, or an individual customer may make market driven decisions that influence what they require from a vendor. A successful change to adapt to

new circumstances requires that all the corresponding elements are changed in support (Kindström & Kowalkowski 2014). Furthermore, a solution is not a dyadic situation with the buyer and seller. Rather, it involves multiple partners in different capacities (Spencer & Cova 2012). This adds complexity to the company's strategic decision making and a business model can act as an integrating concept (Spring & Araújo 2009), drawing together structures, activities and relationships that align with long-term goals.

Ultimately, a business model defines the value generating activities in a network of actors (Spring & Araújo 2009; Nenonen & Storbacka 2010; Mason & Spring 2011). Servitisation can thus be seen as a redefinition of the network actors, activities or the context or structures in which these happen. These are multilevel practices where people's actions and choices shape the structures while the context where they operate influence their actions (Ferreira et al. 2013), and the business model is important in framing and revealing the connections between the multiple levels (Mason & Spring 2011). Viewing servitisation on a structural level as a business model change provides a view of the boundary-spanning extent of the change through the lens of value creation.

3.3.3 Servitisation in a Multinational Company

As discussed before, servitisation is a complex organisational change on a structural level of the organisation through its business model. What complicates the matter further is the fact that many companies embarking on a servitisation initiative are international and operate in many different kinds of national markets and cultures where practices regarding service or services can vary. As value co-creation takes place in customer interactions locally, the frontline sales staff in subsidiaries have an integral role in the servitisation process, but may lack the knowledge, capabilities or inclination to do so.

There is no final consensus on how services should be organised in a company (Baines et al. 2017). Oliva and Kallenberg (2003) advocate for a separate service unit to ensure a service-oriented approach and the right capabilities while Neu and Brown (2005) found that integration of product and service responsibilities was necessary for the ability to offer holistic solutions. Later study findings by Oliva, Gebauer and Brann (2012) enforced the performance of separate service units due to managerial commitment and consequent resource allocation and attention. However, the focus of the study was on the organisation of services rather than efficiency and quality in delivering complex solutions, which implies that there may be notable differences in the management of service as a company orientation and services as offers.

Structuring for service is complex even on a buyer-supplier dyadic level. This complexity is multiplied in international service ecosystems as actors enact practices in social and cultural contexts in order to co-create value (Akaka, Vargo & Lusch 2013). Especially in a KAM setting the programmes and the dyadic relationships are distinctly different, and at the sales and marketing interface the personal level can influence the customer offer (Rehme, Kowalkowski & Nordigården 2013) thus requiring operational flexibility on a global scale. Yet the roles of local and global units in the specific context of servitisation of manufacturing companies has only received attention in the past few years (Kowalkowski, Kindström & Brehmer 2011).

Kucza and Gebauer (2011) propose that organisational structure in the context of global servitisation should include five interrelated elements: global sales structure, the degree of separation between service and product sales units, proximity of service unit to customers, functional organisation, and finally the subsidiary role. Based on these five elements the authors conclude there are different kinds of service approaches which can be applied in firms depending on factors such as the complexity of the offer, customer needs for support, degree of customisation, and so on. While the many different possibilities to combine these elements may mean that there are endless hybrid versions of the approaches to choose from, the implications of the study are that internal HQ-subsidiary roles influence servitisation in terms of accessing local knowledge and customer information and in implementing the solutions through a network of local and global sales.

Services often require a greater level of adaptation than tangible products in international settings due to their relational nature, which means greater HQ involvement is required in the adaptation process (Lindsay et al. 2003). This means that the very nature of the service offer requires companies to structure in a way that allows for knowledge flows between geographic locations. Knowledge management was found to be one of the areas of increasing challenge in servitisation on an international scale, along with local regulations, front-line capabilities, local competition, and internal conflicts due to change resistance (Neto, Pereira & Borchardt 2015). The problem, however, contained its own solution; four out of the five challenges could be solved with implementing measures for management and HQ to gain greater local knowledge, and the fifth operational element was suggested to improve through job rotation and a service structure that allows operational knowledge to be shared laterally.

However, the influence of external environment on any kind of business activity is at the core of marketing, and organising local operations according to HQ strategic

guidelines is a political activity in product and service-oriented business alike. A deeper look on the capabilities and practices of servitised manufacturing companies is offered in Parida et al. (2015), a study which benefits from the setting that business practitioners involved in global service innovation activities were asked to map out the challenges they faced themselves. Thematically, their findings largely support the notion that global service innovation (as a scaled-down version of servitisation) is difficult because services are knowledge intensive by nature and companies lack procedures and practices to transfer knowledge vertically and laterally across the network.

Beyond the need for knowledge sharing mechanisms, including digitalisation, Parida et al. (2015) advocate for greater local autonomy to facilitate accurate response to customer needs, combined with relationship building between the units and stakeholder. This approach supports the single-country finding that organisational capabilities, including network capabilities, facilitate service value creation (Kohtamäki et al. 2013). Further study would be needed to establish whether the moderating influence of such capabilities is even greater in an international situation where networking possibilities and avenues may be more diverse but less intensive in terms of personal contact. However, intuitively one would suggest that even if the influence is not greater, it will not, in any case, be less and therefore special attention should be paid in global service operations to the knowledge sharing and relationship enabling aspects of the internal structure.

The role of relationships and networks is often heightened in large multinationals because they do not necessarily operate directly with the customers but through distribution networks or through third parties. In such cases the servitisation initiative would also involve the partner organisations to ensure value co-creation through customisation and knowledge intensive value propositions, which the partner must commit to delivering and implementing, as well as have the requisite knowledge and skills to understand the customer needs (Hakanen, Helander & Valkokari 2017). An in-house service organisation can be preferable for a manufacturing company looking for full-scale service-orientation, especially as many of their customers will also be global and require guarantees of the global ability to deliver service (Kowalkowski, Kindström & Brehmer 2011). Delivering standardised service quality over a distribution network that varies from country to country might not be feasible and may require concentration on in-house capabilities and fostering strong relationships with accredited partners.

Research on servitisation on a global scale is still a fledgling field but where the extant research seems to initially converge is on four dimensions as shown in Figure 4: 1) Knowledge transfer vertically and laterally, 2) a balance between global value propositions and local value creation, 3) organisational structure in the subsidiary – HQ relationship, and 4) micro level capabilities. These elements show that adding the international dimension in the mix creates complexity within the network configurations in which value is co-created.

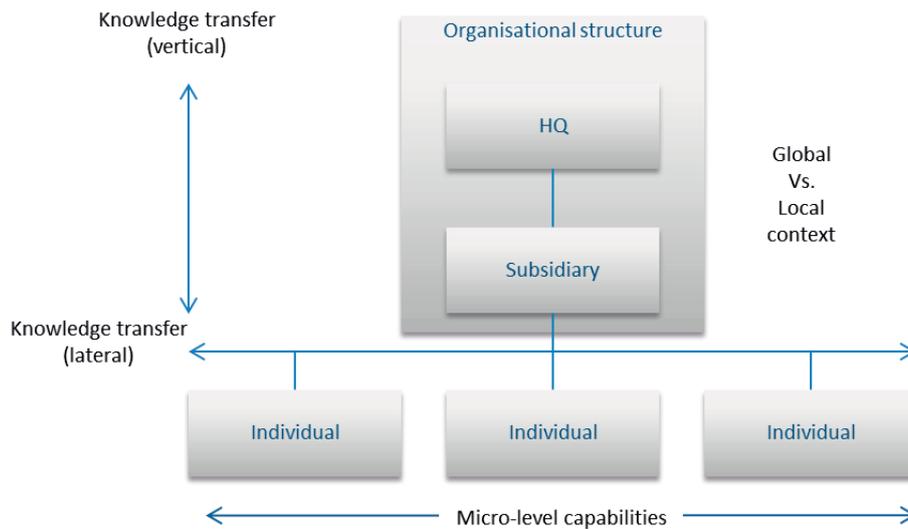


Figure 4. Dimensions of Research on Servitisation in a Multinational Context

3.3.4 The Role of Digitalisation in Servitisation

The embeddedness of digital services in physical products (Holmström & Partanen 2014), as well as the emergence of Internet of Things (IoT) (Rymaszewska, Helo & Gunasekaran 2017) and the opportunities provided by Big Data (Opresnik & Taisch 2015) are forming the servitisation landscape. Digitalisation offers enhanced ways of accessing customer data, integrating the customers' value generating processes at the level of raw data. This means that companies committing to solving customers' problems are able to do so possibly even before the customer is aware that there is a problem.

Information and communication technology (ICT) is an integral, if often invisible, part of servitisation. As services are inherently knowledge-based, ICT has been called the fundamental enabler for services science (Chesbrough & Spohrer 2006; Dotti et al. 2013). The ability to take on relevant parts of the customer infrastructure, monitor incidents such as spare part needs or usage of consumables, and provide services to maintain operational efficiency is largely

dependent on the systems to keep track and automate the processes (Belvedere, Grando & Bielli 2013). Moreover, getting real-time data and having all the more powerful information processing ability also opens up new business opportunities, as maintenance or break-fix services can be detected and sometimes implemented remotely (Neely 2008). ICT can therefore be seen as an enabling factor for servitisation on a practices level.

The servitisation practices can be divided in three areas within the company: back-end efficiency, front-end interaction, and innovation (Coreynen, Matthyssens & Van Bockhaven 2017). The industrial operations benefit from real-time data and the unique identification of the product and customer, allowing tracking and trouble-shooting on the spot (Dotti et al. 2013). Customer relationship management (CRM) tools together with social media can be used to enhance the customer interaction and customer engagement with the company (Choudhury & Harrigan 2014). Moreover, IoT can connect people with each other, people with things and things with other things directly, generating value and knowledge on multiple levels of interaction (Rymaszewska, Helo & Gunasekaran 2017). Organised collaboration is increasingly important for servitisation (Opresnik & Taisch 2015), and therefore access to data, analytical capability and processing power combined with the techno-social approach to interaction are necessary parts of servitisation.

However, digitalisation can also offer challenges for the company if it cannibalises existing products, especially as running a digitalised offer incurs minimal marginal costs, which may erode the perception of its newness or value in the customer's eyes (Vendrell-Herrero et al. 2017). Innovative offers can be used to prevent such value depletion, and their digitalisation challenges manufacturers' market assumptions in terms of how they operate, offer value and compete (Lerch & Gotsch 2015). Digitalisation enables companies to allocate resources and share information more effectively, thus providing greater service quality (Kindström & Kowalkowski 2014). Digitalisation has a pervasive role in servitisation as an enabler, but also as a transformative factor in how the company views the market and customer relationships.

3.3.5 Deservitisation or a Servitisation Failure

As earlier discussed, servitisation is not always a linear, forward-unidirectional process (Finne, Brax & Homström 2013; Kowalkowski et al. 2015) and there are not always easily identifiable steps that can be separated from the gradual increments exploiting rising opportunities (Brax & Visintin 2017). Sometimes, servitisation fails. Other times, servitisation as a company-wide initiative with

multiple integral processes to enhance value generating activities requires a renewed focus on producing and selling products. If the company's end-game is to enable value creation, internal or external conditions or change in them may dictate that reducing the servitisation intensity might be a strategic choice worth making.

Deservitisation is defined here in line with the editorial of the special issue on servitisation and deservitisation in *Industrial Marketing Management* (Kowalkowski et al. 2017) as a holistic change of service-orientation to product-orientation, while service dilution represents a lesser focus on services in the company portfolio. Servitisation failure occurs when the management expects a transition to greater service integration would increase value creation but is unable to reap the benefits (Valtakoski 2017). While studies generally focus on understanding the processes of how to become more service-oriented, literature on deservitisation and servitisation failure concentrate on why and under which conditions it is advisable to do so.

A service paradox, as mentioned earlier, was found to occur when servitisation efforts and investments do not result in corresponding profit increases. If managers are not prepared to accept the complexity, risks and effort servitisation requires, the level of challenge and any initial pushback to change may convince them to return to a status quo (Gebauer, Fleisch & Friedli 2005). Managerial commitment to the change is therefore required to start such an all-encompassing initiative. The risks of servitisation are not to be taken lightly by management, though. While the expectation in growing service business is that enhanced value creation with customers would reduce risk of bankruptcy, Benedettini, Swink & Neely (2017) found that this is not supported unless the firm contextual factors are aligned accordingly. Moreover, in an earlier study, the same authors found that adding services to the portfolio may even increase the environmental risk of bankruptcy as the customer requirements, expectations and relationships changes (Benedettini, Neely & Swink 2015). Management commitment to servitisation must therefore be understood in light of the risks that failure can bring if the initiative is not implemented effectively.

The relationship between servitisation and financial performance overall is unclear (Oliva, Gebauer & Brann 2012). While there are success stories abound, companies such as Xerox show that there is another side to the story. This company recently announced they are diversifying their much lauded service operations into a separate arm carrying the name Conduent, and thus removed from the Xerox brand name associated now solely with print and imaging products. Thus, shareholder value is grown by detaching servitisation from

operations rather than having greater integration. This is in line with Oliva, Gebauer and Brann (2012), who advocate separation as a condition for managerial commitment, yet Xerox's past performance implies that commitment has been stable. Accounting for contextual variance may therefore be necessary for assessing service profitability, not least because there is a learning curve for using existing structures, (human) resources and capabilities to do new things, and sticking close to core competence is recommended to achieve desired results from servitisation (Fang, Palmatier & Steenkamp 2008).

In line with Fang et al. (2008) and Visnjic Kastalli and Van Looy (2013), a critical mass of services is required for establishing a profitable business. Their study shows that there is a U-shape progression where initial service efforts may boost profitability but scaling up causes a temporary dip until a critical mass is reached. This supports the behavioural explanation of Gebauer, Fleisch and Friedli (2005), emphasising managerial commitment to expected future results, and also implies that there is a corresponding learning curve for customers and/or the frontline – customer relationship in accepting services. However, perception of poor service quality even if the service is offered as a free add-on can affect the customer's perception of the whole company and willingness to buy tangible products (Brax 2005), extending the risk of servitisation to the product business as well.

A reason why assessing servitisation performance and profitability is difficult could be that the measures for services are different than for products, service sales cycles are longer and profits get divided over contract periods. However, looking at overall firm profitability and sales volumes also brings a host of contextual factors such as aligning strategies with capabilities (Ceci & Masini 2011), which are long-term transitions and difficult to capture in a cross-sectional study. Longitudinal studies may yet provide more knowledge about firm performance in service context, especially as the trend towards services seems to be still increasing.

Studies on deservitisation are rarer than those looking at the successes and failures of achieved profitability. Valtakoski (2017) identifies two main approaches to servitisation that challenge the linear assumption of gradual increase of service portfolio and activities: stepwise movement back and forth on the product-service continuum (e.g. Kowalkowski et al. 2015), or abandonment of the stepwise approach altogether and starting servitisation from the customer interface and building the servitisation infrastructures later (e.g. Finne, Brax & Holmström 2013). When thinking of servitisation as a temporal phenomenon occurring in an external context, the industry-level factors will also influence on what kind of services the company will offer and when (Cusumano, Kahl & Suarez 2015). Examining the Xerox example from this perspective, it is likely that Xerox

benefitted from the first-mover position in offering extensive business services in the print industry, but as the industry standards and norms with competition and external environment have changed, the demerger became a viable option under the current circumstances. Thus, deservitisation can be the right strategic choice.

Many challenges stand against the intrepid manager who would servitise a manufacturing company, and any one of them can influence the speed or direction of servitisation. Ranging from internal change resistance from fear of product cannibalisation or cultural inertia to customer scepticism (Lütjen, & Schultz 2015), companies will face barriers that must be overcome in becoming service-oriented. However, servitisation continues an attractive choice for companies facing product commoditisation (Matthyssens & Vandembemt 2008) or who want to be proactive in securing a place in customers' value creation. In the next chapter I will discuss more the elements of the customer relationship and the micro-level of servitisation.

3.4 Value in the Customer-KAM Relationship

As earlier discussed, value and value creation in this study is considered in line with the Nordic School approach to service logic and consequently the customer is seen as ultimately creating, determining and experiencing the value (Grönroos 2011). Structural considerations influence the company's capability to generate activities that support the customer's value creation, but value co-creation takes place in customer interactions. Therefore, frontline personnel, namely KAMs, have an important role in the value creation process. However, value creation is not always successful and I will therefore also discuss in this chapter the failure to create value.

3.4.1 Frontline Employee Role in Value Creation

The role of KAMs has been discussed in chapter 2, but because more people in varied roles than just KAM are in customer contact, I will discuss value creation here in terms of frontline employees in general, with a focus on sales people. Frontline employees are pivotal for service innovation (O'Cass & Sok 2013). Because they understand customer needs and organisational capabilities to respond to them, their early involvement has been found to generate more attractive value proposals (Karlsson & Skålen 2015). Thus, frontline employees can manage expectations from both sides and ensure the customer does not feel they have been overpromised and under-delivered.

Value propositions have been conceptualised as promises the company gives about the value they can expect to experience in-use (Lusch, Vargo & O'Brien 2007; Grönroos & Voima 2013). Therefore, if the offer is what the customer gets and is always explicit, value proposition in contrast is the company's best guess or sincere hope of what the offer means to the customer, and can be either implicit or explicit. For example, price becomes part of the value proposition (Kowalkowski 2010) with explicit and implicit dimensions: the former evident in the number on the tag while the latter implies the expectations that the customer can reasonably have. The most expensive price on the market may be used to indicate a premium brand that can be expected to be durable and produce high quality results, or a low price can indicate as a good deal for a customer who does not need to go premium.

However, if value proposition is the company's promise of future value, then the role of co-creation is unclear. In goods-dominant logic, value is determined by the company and informed to the customer. However, service logic emphasises the interaction between actors. Skålen et al. (2014) conceptualise service innovation as the formation of value propositions where frontline employees integrate practices and resources. Customer involvement in innovation has traditionally been limited to feedback and surveys, which may be counterproductive or restrictive because customers do not have the knowledge and insight to imagine something ground-breaking they have not experienced (Matthing, Sandén & Edvardsson 2004). Therefore, the frontline employee's role as the integrator is crucial for the innovation process.

Integrating customer information in new service development can improve market performance (Carbonell & Rodriguez-Escudero 2014). Yet knowledge transfer from external environment is not the only influence of frontline employees on service innovation. Studies such as Ordanini and Parasuraman (2011), Melton and Hartline (2013), and Santos-Vijande, López-Sánchez and Rudd (2016) examine the influence of the continued co-operation between frontline employees and customers for the success of new service development processes. The results converge in that active involvement of employees improves overall success. This implies that frontline employees do not only take a role in information gathering but their process and relationship capabilities are equally important.

Interaction processes take place within the relationship in which value is co-created and those processes have characteristics that influence the success of the value proposition. Haas, Snehota and Corsaro (2012) conceptualise these as jointness, balanced initiative, interacted value and perception of value. The authors reason that combinations of resources in novel, unexpected ways that are perceived to be beneficial by the actors are the basis for value creation, in line with

the SDL fundamental view on service as the base point of business exchange. This view also reinforces the Cantù, Corsaro and Snehota (2012) study which found that resource combinations take place in a relationship where it is the mutual sharing that leads to emergent outcomes, and that the actor's perceptions and view point influence the shape and form these take.

Frontline employees thus have a strategic role in value creation through individual interactions (Baumann & Le Meunier-FitzHugh 2014). These relationships also represent a resource for the company because they cannot be replicated nor do they become commoditised (Ulaga 2003). Yet this elusiveness also makes them difficult to study and further research is needed to understand the interactions and the integration of individual and company level value processes (Celuch, Bantham & Kasouf 2006, Bhagat 2009, Salomonson, Åberg & Allwood 2012). This is especially true as companies are increasingly looking towards their frontline as the strategic boundary (Terho et al. 2012), where customer value is created through on-going relationships and incremental interactions.

Avlonitis and Panagopoulos (2010) found surprisingly that research on sales function management is on the decline among marketing scholars. Concurrently, the focus in sales research seems to have moved towards value creation, especially as interest in service research has increased. Studies in the sales field often take on a viewpoint on sales as a function integrated in customer value processes (e.g. Barber & Tietje 2008, Storbacka et al. 2009, Dixon & Tanner 2012, Blocker et al. 2012, Haas, Snehota & Corsaro 2012, Sullivan, Peterson & Krishnan 2012, Baumann & Le Meunier-FitzHugh 2014), or as relationships actors (e.g. Haytko 2004, Celuch, Bantham & Kasouf 2006, Bhagat 2009, Corsaro & Snehota 2010, Niculescu, Payne & Krishnan 2013). Yet sales people are also human beings, whose emotional investment and commitment has a proven effect on the dyadic relationship with the customer (Andersen & Kumar 2006). Thus, sales people take on multiple roles in both their own company sphere and in the customer sphere, and the greater their immersion in related activities, the greater possibility they have to add firm value (Flaherty & Pappas 2009).

The customer's perception of value is ultimately what decides whether value has been created or not. Despite efforts to track customer satisfaction or loyalty, many companies lack the tools to measure accurately what value and how much the customer has experienced (Lapierre 2000). The vendor's ability to accurately anticipate what the customer perceives as creating value for them drives satisfaction and loyalty (Flint, Blocker & Boutin 2011). Having this knowledge, which is often tacit and embedded in the frontline, can make a difference to the company performance.

Aside from relationship and knowledge capabilities, frontline employees also occupy a crucial position in customer value creation processes because they are the customer's connection to the company. Their process capabilities or understanding of the company puts them in a position where they can advocate on behalf of the customer. Thus, the social networks of the frontline employee within their own company can be used as resources that are combined with the customer to co-create value. A company culture which fosters the development of social capital and is supportive of the employees' service activities can influence the relationships between actors (Ellinger et al. 2013). Managerial actions in the level of culture and sales strategy will have a ripple effect on the customer relationship (Terho et al. 2015).

The role of frontline employees in value creation is conceptually more complex than many people working in such roles are given credit for. What is evident from extant research is that there is a considerable amount of duality involved in customer work where the person must balance customer and company considerations. While relationships sometimes turn sour and sales unsuccessful, value creation is rarely considered in itself to be anything but a positive endeavour. In the next chapter I will discuss the situations when value fails to emerge.

3.4.2 Failure to Create Value

Value co-creation is generally assumed to lead to positive outcomes in terms of more value to the customer. Extant research does, however, recognise that this ideal state is not always reached and there are occasions when the provider and buyer perceptions or expectations differ to the degree that interaction does not lead to value but ends in a negative experience. At worst, this can lead to feelings of abuse where neither party has an understanding of where the other is coming from and blame is assigned accordingly (Kashif & Zarkada 2015). Alternatively, the interactional nature of value co-creation can even lead to opportunistic behaviour and role conflict, which, if left unmanaged, can erode the perception of value (Chowdhury, Gruber & Zolkiewski 2016).

Plé and Chumpitaz Cáceres (2010) provide a concept for value co-destruction as the interaction process whereby at least one party will experience diminished well-being as a consequence. As the authors subscribe to the SDL, their view on co-creation (and therefore co-destruction) is that it encompasses all the customer interaction with the company and can therefore occur also in the customer's use of goods. They conceptualise value co-destruction as a misuse – either intentionally or unintentionally – of resources which leads to one or both party feeling they have not gained what they expected from the interaction.

Value co-destruction is further expanded upon by Echeverri and Skålen (2011) in a case study of service interactions, where they found that practices can either co-create or co-destroy value based on the degree of similarity in the interacting parties' view on procedures, understandings and engagements. Their study assumes a very different kind of context from Plé and Chumpitaz Cáceres (2010) because it concentrates on unique service encounters between bus and tram drivers and public transport customers, so it does not entail any relationship building or structural implications. However, the focus on actors highlights the interactional nature of value even when the offer is completely removed from the actors. Namely customers may experience value co-destruction based on their expectations of the personal greeting from a bus driver, irrespective of whether this influences the actual offer of getting a ride to their destination.

In B2B customer relationships the role of actors is especially great as these relationships tend to be long-term and include multiple encounters. The perceptions of actors about what their goals are and what they can expect from the relationship will influence their experience of value derived from it (Prior & Marcos-Cuevas 2016). Perceptions will also influence the underlying interpretation that the disappointed party will assign to the events, as resource loss can also be felt by a customer for example as a loss of personal esteem, which is felt more acutely (Smith 2013).

Value destruction assumes that one or both parties had an expectation of value that was not met and this left them with a negative perception of the encounter or relationship. However, it is not necessarily the case that some pre-conceived expectation is being destroyed, but value can fail to materialise in a partnership in a more neutral manner. Makkonen and Olkkonen (2017) propose value no-creation as a term to signify a situation when the interactional outcome is indifferent. Value is not realised but there is not a significant decline in either party's well-being either. Furthermore, the study presents a case study where value co-creation activities take place over a series of interactions where the perceptions of the individuals involved, the organisational structures and norms, and the macro-level narratives influence the outcome. This approach supports the Vafeas, Hughes and Hilton (2016) approach of value diminution as the softer form of destruction, based on absence of trust, inadequate communication, imbalance in power or dependence on each other, and lack of coordination and human capital.

In this study, I build on the value no-creation view and further examine the link between value co-creation activities in the interactions and how these are influenced by the meso-level context in which they occur. As customers interact in relationships with KAMs they engage in value co-creation activities but the

organisational structures and processes are instrumental in implementing agreements. Therefore, value co-creation in one area of the relationship may not be supported in another, and because a customer has a relationship both with the KAM as a person and with the company as a whole, the sum total of their experience may be positive, negative or indifferent.

3.5 Conclusions Related to the Study Framework

In the previous chapters I have discussed the literature streams and theoretical foundations of this study. Relating these back to the framework of the study, I will show in figure 5 the framework with added explanations of how the literature streams are connected to the absorptive capacity process.

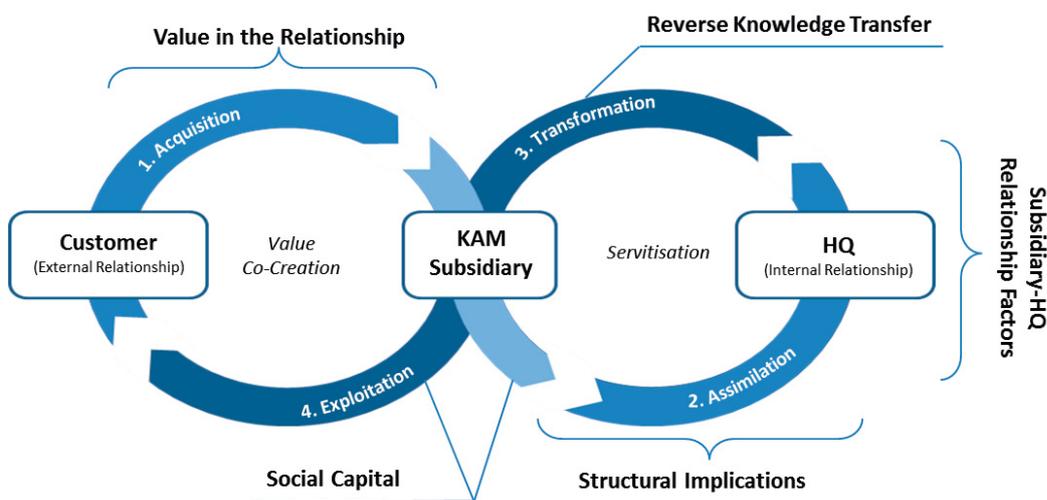


Figure 5. Study Framework with Related Literature

As can be seen in Figure 5, the preceding literature review in chapters 2 and 3 encompasses the study framework in its entirety as an absorptive capacity process, but also through its component parts. Thus, knowledge transfers on an organisational level refer to the meso-level relationship between the subsidiary and the HQ, corresponding to the structural implications in servitisation. Similarly, knowledge transfer in customer relationships relates to the micro-level relationships between KAM and customer, which is also the value creating relationship in servitisation literature. Social capital as a concept bridges the gap between the two and operates as a relationship factor, and is also apparent on a cultural level within the intra-organisational networks.

It is important to separate between the different levels and the different phases because the forces and dynamics that influence the phenomenon are not the same

with different actors. Furthermore, as I have tried to show when tackling separate parts of the process, the way researchers have traditionally approached the different areas can vary enormously, leaving the overall picture as a collection of different viewpoints. For example, a managerial view on a customer-KAM relationship will only provide a partial understanding of what is entailed, while focusing solely on the personal level risks overlooking the underlying dynamics influencing operational efficiencies. The literature review is thus compiled in a way that reflects the micro – meso nature of the framework.

In the following chapter I will discuss the methodology used in this study for the empirical research.

4 RESEARCH APPROACH AND METHODOLOGY

In this chapter I will discuss the empirical approach I have chosen for this research and the reasons why I believe the choices were justified. The chapter will include a presentation of the single case context within which I conducted the interviews, as well as seven embedded cases as the customer-KAM dyads.

4.1 Research Approach

As discussed in the introduction chapter, my approach to servitisation is as a phenomenon that occurs dynamically within the internal and external relationships of the company actors through factors that have a bearing on the structures in which knowledge transfer occurs. The aim is to look at the factors as they manifest in the different relationships and parts of the process, and what this means to the interplay between servitisation as an organisational change process and value creation as a continuous activity with the customer. Consequently, I chose a case study as the most appropriate research methodology.

A single case company provides a context for the phenomenon allowing the research to approach servitisation as an initiative that occurs in different levels of the organisation differently. A case study is fitting for the critical realism research philosophy as it provides a holistic account of events within a context, thus creating an understanding of people's stated motivations, observable actions and underlying contextual or causal factors (Van de Ven & Poole 2005). In this research the context is the company and its history, business model, values, and operational practices, processes and routines all influence the way people interpret how they should act and behave within the company norms.

The research phenomenon is thus embedded in the context, and the micro and meso levels of people vs. structures are interdependent, making the phenomenon particularly suitable for the case study method (Pettigrew, Woodman & Cameron 2001). A common issue in combining actors and structures in the research focus is how to show both without conflating them (Leca & Naccache, 2006). Using critical realism as an approach can be used to overcome this difficulty and juxtapose the micro and meso levels. Because critical realism is a fairly recent philosophy, dating to the early work of Bhaskar (1975) and from there gaining popularity among various fields in social studies, the next chapter will provide a short overview of its basic tenets applied in this research.

4.2 Research Philosophy

The way a researcher decides to carry out the study – the aims they set, the methods by which they gather data – are largely dependent on the researcher’s worldview (Guba & Lincoln 1994: 107). The ontological basis chosen in this study is that of critical realism. As an approach, critical realism rejects the positivist idea of an attainable, external truth, but does not fully embrace the interpretive position of reality as a prism of multiple individual viewpoints.

The basic tenet of critical realism is that while there is a reality, our ability to know and understand it is limited (Järvensivu & Törnroos 2010). In order to gain some greater understanding of this reality external to our senses and interpretations, it is necessary for the researcher to understand the human agency causing events to occur, as well as the social structures in which the actors operate (Welch et al. 2011). Context therefore has a significant role in studies adopting the critical realist worldview, to the degree that Welch et al. (2011: 745) labelled this method of theorising from case studies as “contextualised explanation”. The aim of the research in such a case is to combine the individual perspectives of actors to the unique situation in which they operate in order to unearth some objective, observable outcomes.

Thus, veering away from different forms of interpretive approaches, critical realism seeks to understand causality (Easton 2010). When researching processes or relationships where people’s actions influence one another, critical realism is consequently a reasonable orientation to adopt (Ryan et al. 2012). It is deemed particularly suitable for this dissertation because absorptive capacity is viewed here as a process of knowledge transfer activities occurring in different relationships. Causal explanations can be detected in the social structures underlying the different phases from acquisition and assimilation through to transformation and exploitation, as well as in the interplay between the value creating relationships and the organisational practices where servitisation occurs.

In an ontological continuum from naïve realism to strict relativism, critical realism positions towards the middle and shares common ground with moderate forms of social constructionism. Järvensivu and Törnroos (2010: 101) make a distinction between critical realism and moderate constructionism based largely on the truth claims of each: critical realism attempts to make these as an end result while moderate constructionism treats them more as a starting point for continuing dialogue. Constructionist views also prohibit separation between human agency and the context within which it occurs, viewing the two so deeply interlinked that neither can be said to preclude the other (Peters et al., 2013). Critical realism

allows for structures in a reality independent of the mind, which does not exist in the constructionist world-view (Mir & Watson 2001).

Other distinctions are made from basis of the social setting in which research occurs. Social constructionism can be seen either as inherently inclusive of social and political issues that affect human life in ways that critical realism only dips into at will (Denzin & Lincoln, 2005), or else as blurring the lines between science and socio-economics in potentially harmful ways (Newton, Deetz & Reed, 2011). Thus, even though critical realism has far more in common with the moderate end of constructionism than with the far restrictive end of realism, the two enjoy a complicated relationship. The matter is surely not helped by the variety in terminology that makes it difficult to distinguish between the ‘weak’ and ‘strong’ claims on both sides of the fence.

Ultimately, however, the question should not be “What is the right worldview to do research?”, but rather “What is the right worldview to do this research?” Asking the latter question in terms of the aims set for the work and considering my own personally held position has led to the choice of critical realism as the appropriate choice. Within critical realism it is possible to accept that social structures, which are here organisational structures, are socially constructed (Peters et al., 2013) while maintaining that they are, nevertheless, real.

By definition, critical realism incorporates some degree of epistemological relativism (Al-Amoudi & Willmott, 2011). Relativism supplements the idea of reality being socially constructed with multiple realities, which may conflict (Guba & Lincoln, 1994: 110). Epistemologically this means that in the research process it is necessary to acknowledge the differing realities the researcher has access to and how each individual position of the interviewees reflects only their personal view (Al-Amoudi & Willmott, 2011).

In terms of this dissertation, understanding this view is very important as it simultaneously clarifies the focus on individual front-line employees and customers’ experiences, as well as explains that the dissertation is not aiming to generate results that could be generalised across all companies. However, in keeping with critical realism, it is assumed in this work that the actors have a shared understanding of concepts such as “organisation”, “company” or “culture”. The choice of a single case context for embedded cases is partly explained with the need to have a unified context in which the actors can be assumed to have constructed joint social understanding of the structures within which they work.

Theorising in a critical realist case study is generally done through a process of abduction where data and theory are continuously balanced against each other and inform one another in the development of the case (Dubois & Gadde 2002). The abductive approach reveals deep structures through the observation of patterns (Alvesson & Sköldbberg 2000: 17). Figure 6 presents the research process as an iterative flow, showing where theory and extant literature informed the formulating of meaningful research questions and problems, and where empirical findings refined the focus of the theoretical approach.

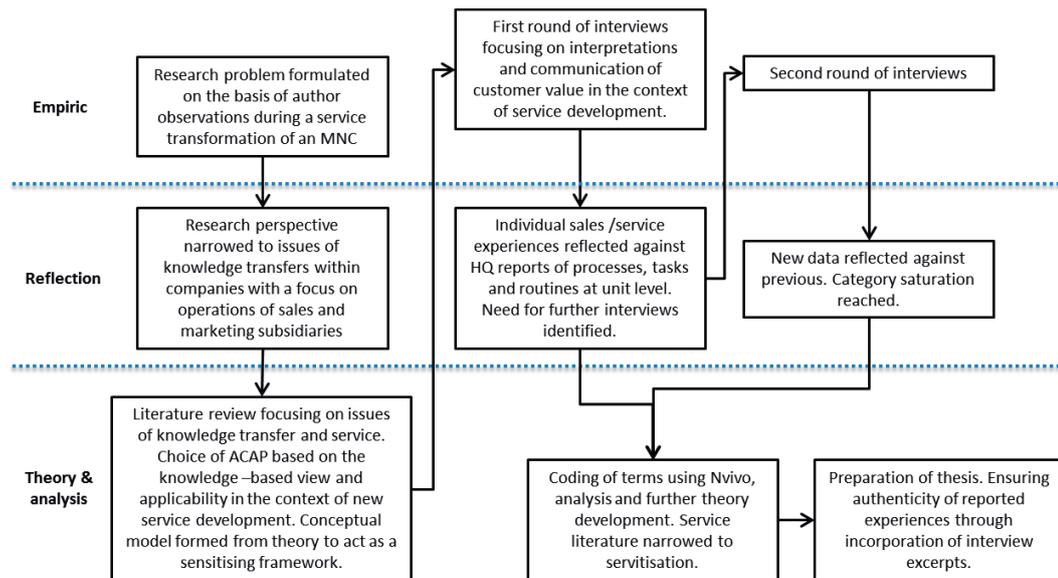


Figure 6. The Iterative Research Process of the Study

Furthermore, the abductive approach entails a process where initial theoretical assumptions are challenged by surprising findings, which then lead to the researcher constructing plausible explanations for how and why events occur the way they did (Van Maanen, Sørensen & Mitchell 2007). Because this approach contains abductive, deductive and inductive sub-processes, it is possible for the researcher to lean on different approaches in different phases of the research, while the whole process is still abductive (Järvensivu & Törnroos 2010). Transparency in the research process is therefore useful for understanding the researcher's epistemological stand-point (Nenonen et al. 2017), and in differentiating the iterative processes.

In this research, the beginning phase bears more resemblance to a mix of inductive and deductive approaches with an emphasis on the latter. The theoretical framework has been informed by my own experiences (as reported in the introduction), but the form it has taken is largely driven by synthesis of extant theoretical works. Absorptive capacity especially has been a focus of many

conceptual studies and combining this with research on headquarter – subsidiary relationships was instrumental in generating the double loop model that provides a basic level structure for this study.

The data collection and analysis phases were more purely abductive. Chapter 4.4.3 on data collection provides more details on how findings influenced the interviews. While service research has provided context for the study, the final focus on servitisation was decided on during these phases. Thus, the on-going process included intertwining conceptual development and empirical observations, resulting in an abductive process (Nenonen et al. 2017). The findings are reflected against the theory in greater detail in the concluding chapter of this research.

4.3 Rigour in a Case Study

The tradition in positivist studies is to ensure validity through triangulation and seeking convergence of evidence from multiple sources to confirm the truth of an event (Yin 2009). The positivistic approach dominates the field of research in industrial marketing (Easton 2010) and international business (Welch et al. 2011), though case studies are among the most popular methods to be used in scholarly articles in both fields. So prevalent is the influence of positivism that few studies in this tradition explicitly clarify their philosophical standing (Piekkari, Welch & Paavilainen 2009) or report rigour criteria not in line with the positivist tradition (Gibbert, Ruigrok & Wicki 2008), enforcing the expectation that scientific research on international business mainly seeks to make truth claims and/or test hypotheses.

Critical realism challenges this school of thought on the basis that it seeks to understand social actors, structures and mechanisms, and through these, an explanation for underlying reality can be explicated. A case study is eminently suitable for a critical realist study as it creates a shared context within which actors have shared meanings, norms and beliefs about central concepts. However, eschewing the positivist tradition as practised in quantitative studies imposes a new issue on how to ensure the study findings and claims are justified and build scientific knowledge rather than offer a point of view. In short, how to ensure rigour in a case study.

The most influential works on case study methodology in the field of business studies are undoubtedly those of Yin (2009, [1984]) and, building on that, Eisenhardt (1989), both of which show preference for multiple cases over single largely on the similar grounds that having multiple sources allows comparisons

and corroboration. Both approaches rely on a largely positivist tradition on finding convergence and ensuring validity through uniform checks and procedures.

An alternative approach by Lincoln and Guba (1985) challenged the notion of positivist validity methods being applied in qualitative study. The authors advocated for research participation in checking the results for a sense of reality (p. 640), as well as researcher reflection of their own background and status as a researcher (p. 638). Though their criteria aimed at making a difference between positivist and constructionist viewpoints, it did not surpass the positivist origins of the scientific field and was soon challenged by the more postmodern views of finding meanings through language and challenging authority discourse (Alvesson 2002: 48). No consensus exists to this day about how qualitative research should be carried out, except on that justification of what, how and why it has been done in a specific way should be made clear to the reader. Thus, I will detail next the approach I have chosen to take in terms of transparency and reflexivity, and the justification for it. The next chapters will elaborate on the steps taken to ensure that the reader is fully aware of what actions were taken and why.

In this study I follow the guidelines set by Bansal and Corley (2011) *Academy of Management Journal* editorial where the editors discuss frankly the kind of criteria they expect in this well-respected journal. In a desire to invite more diverse and interesting research, the editors are also keen to ensure that submitted works meet a level of quality that can be expected to be published. To achieve this, they encourage creativity and flexibility with constraints that include transparency in explaining how discoveries were made and the personal stake of the researcher, and a clear connection between theory and data. Transparency of assumptions and premises improves the overall rigour of the work and makes it understandable for the peer community (Mir & Watson 2001), thus allowing for debate and testing.

While Bansal and Corley (2011) specifically discuss that coding is not a virtue unto itself but what matters is showing the link from the data to theoretical consequences and implications, coding is still a widespread tool for achieving this. Coding allows the creation of thematic groups that show the logic behind the connections and exemplifies points of convergence and distance. As this study is examining how different people and groups perceive value and service, coding provides a convenient method to combine points of view and establish the different ways people talk about the same things. Thus, one respondent may talk of value in terms of the human contact involved, while another sees it as a financial gain, and coding these appropriately will provide a cohesive view not only for the researcher but for the reader as well of the dimensions of the phenomenon.

It is, however, important to look also behind the codes and see the underlying story or structures that influence the phenomenon. To do this in a manner respectful of the need to be transparent and engage with the material, I employ the concept of reflexivity. In practice this means constantly reflecting my interpretations of data against theory (in line with the abductive approach) but also against my own assumptions and preconceived notions. In this sense, a sensitising framework is both a blessing and a curse: It can be used to keep the interpretation anchored to a sound basis, but it should not direct the analysis so findings conform.

To avoid this, I have been conscientious in the coding of the results and their interpretation to account for the context of the phenomenon and the respondent. As Alvesson and Sköldbberg (2000: 275) say: “A strong feeling for the social reality under study can be insisted on as an important criterion for good research.” In order to get deeper in the social reality in the case, I wanted to carry out the interviews face-to-face rather than through phone or video call. Being present at the site and seeing first-hand the enormity of the equipment and the complexity of the factories, as well as meeting people in their own offices and on the road where they carry out their work was helpful in understanding their social environment.

Furthermore, I sought information beyond the interviews about the case company. Table 7 below lists the primary and secondary data sources, as well as the reflective measures taken after the interpretation to make sure the company representatives regarded the results to be in line with their view of reality. The discussions ensured that the results made sense, and were factually correct and meaningful

Table 7. Data Sources of the Study

Source	Action
Primary	32 face-to-face interviews
Primary	Observations and field notes
Secondary	Company website (latest news, offering)
Secondary	Newsletter (case studies, servitisation initiative)
Reflective	Presentation of results in three team meetings at case company
Reflective	Report and results given to company service manager (not interviewed) with a request for feedback

While the interpretation focuses on the interview results as the only source of information about respondents personal beliefs, other sources were used to enrich my understanding of the context in which they operate. Reflecting the results

against my understanding of the case situation was then accompanied with an attempt to reflect against the study framework in terms of where the results fit in line with what is expected, but also in where they do not. Highlighting areas where results did not fit with expectations and new ideas came up ultimately proved to be at least as fruitful as finding areas of conformity, as can be seen in the discussion of the results.

4.4 Research Process

In order to provide a better understanding of how the research was carried out, I will discuss in this chapter the research process in terms of how and why I selected the case company context and what steps I took to ensure the research is trustworthy.

4.4.1 Case Selection

As the research relies on a single case context, choosing the right kind of case company was crucial for reaching meaningful results. As is typical for qualitative research, the case was not chosen on the basis that it would represent a population; rather it is the individual, unique features that make the case interesting and provide insights on the causal mechanisms that determine why the company has evolved in a specific way.

The case selection process commenced with specifying a criteria that was necessary to be fulfilled in order for a company to qualify. The criteria was that the company should: 1) operate in two or more international locations in addition to its strategic HQ home country location; 2) belong to a traditionally product-driven industry such as manufacturing; 3) be in the business-to-business field with a system of account management through relationships; and 4) actively engage in adding services to its portfolio or be otherwise interested in service development.

Based on the first three criteria and public information about companies, a list of 28 international companies headquartered in Finland was drawn. Finland as a home country location was not considered a primary criterion and any given home country would have been acceptable for the study. However, a Finnish company was considered an advantage for the study for two reasons. Firstly, Finland has a high degree of servitisation in the manufacturing sector, second only to the United States (Neely, 2008). Yet the national language of Finland is Finnish rather than English, which means that the research can take into account issues or factors emanating from the language difference between subsidiaries and HQ staff.

Secondly, my own background as coming from Finland and speaking Finnish could be used to secure a higher level of access and to provide a shared cultural context for reflection, in line with Caprar (2011). The fourth criterion could not be fully determined through public information so the companies on the list were contacted through email and phone and their interest to be involved and suitability based on the fourth criterion were established.

From the list of 28 companies contacted, in 18 either the right person could not be reached, or they wanted to consider the proposition further internally. Four companies were not interested to participate in the research or not currently in the position to spare resources for it. Of the companies that expressed immediate interest, five had to be excluded as further conversation revealed that they did not fully comply with the selection criteria. Table 8 below summarises the reasons why 27 out of the 28 companies on the list were not included in the study.

Table 8. Reasons for Company Ineligibility/Exclusion from Research Scope

Number of Firms	Reason for Exclusion
18	Right contact person could not be reached or they were undecided and the request was deliberated further internally
4	Declined to participate
5	Expressed interest but were found ineligible for following reasons:
	Firm 1 (energy) Service development only in the consumer business
	Firm 2 (manufacture) All decision-making about service business regional, HQ only an administrative hub
	Firm 3 (manufacture) Local operations only in one international location, other locations served through HQ export activities
	Firm 4 (mining) Limited local operations and KAM activity
	Firm 5 (manufacture) Limited service activity
27	Total number of firms contacted but not included in the scope

At this point, one company here called Delta agreed to take part in the study. As one company was sufficient for the purposes of the study, the selection process was ended and the companies that were still undecided were not pursued further.

4.4.2 Case Description

Delta is a Finnish company operating in multiple areas of heavy industry manufacturing and energy. Because Delta operates in several, partly disparate fields of business, the research will only focus on the paper machine manufacturing arm of the company. With a long history of operations in Finland and abroad, Delta is one of the leading companies in the paper machine industry worldwide, though it faces heavy competition from established international companies and more recent entrants from emerging economies.

Delta has operations in five geographic regions of North America (NA), South America (SA), Europe, Middle East and Africa (EMEA), China and Asia-Pacific, and employs over 12,000 employees. Its customers are mainly large paper mills, often with significant bargaining power and highly specialised, individual needs. The customers operate primarily with a KAM, who heads a mill team and is the primary contact person for all customer queries, barring day-to-day queries such as ordering spare parts or consumables through a partly automatic system. The company has a specific internal term for the role but in this research, I will use the common parlance term for consistency. The KAM is also the preferred first point of contact for internal queries about the customer and there is an increasing emphasis to grow the role so that one person would be fully cognisant about all the activities pertaining to the customer.

The KAMs are supported by a team of support staff. Depending on the location this may be local or regional. As Delta is a matrix organisation, management is on functional basis and may be local, regional or global. Global expert teams led mainly from Finland and Sweden, depending on the area of expertise, are available for queries and onsite support based on customer needs.

The history of Delta is one of constant change. The core part of the business started life as a part of another big Finnish forestry company. During its lifecycle it has demerged and merged and demerged again with the original parent. As people in the paper industry tend to have long careers, due to the specialisation required to operate the machines and the hitherto stable industry conditions, many of the customers remember operating with Delta under a variety of names, and signs of old branding is still visible in some of the mills. As both companies are Finnish and in related industries, branding can still largely rely on the same strengths and mental image even after the demerger.

Delta has grown organically and through a concerted effort of acquisitions. Through acquiring companies in adjacent industries Delta has grown its offer and spread to new markets. The subsequent acculturation of the acquired businesses

has led to some structural choices that have had an influence on how knowledge is transferred within the company. This is largely due to the fact that so much of Delta's business requires specialist knowledge that is not easily transferred and thus a network of experts in niche areas, from the point of view of the greater Delta offer, is needed. Co-ordination of these networks of actors alternates between regions and HQ. The degree the different specialists visiting the customer talk to each other or communicate to the centralised decision-making structures can vary wildly. Furthermore, on the HQ end some actors still identify with the small, specialised company ethos that their pre-merged companies had, and moving that mind set to the holistic, solution drive culture Delta wishes to cultivate can be challenging.

The paper industry is rapidly diminishing as a consequence of modern information technologies. Paper mills are closing at an alarming rate and the successful ones are often looking to cut costs, which limits investments. There are, however, different kinds of producers in the market and not all of them are suffering hardship. White paper, such as is used for printing or documents, and news print are being used less but the use of tissue paper is rising especially in emerging markets where large populations are incrementally having access to more income. Online purchasing has also raised the need for cardboard and brown paper is having resurgence as a consequence.

Delta's current position in the market is strong and it is seen as a world leader in paper machines with only a handful of competitors who can offer a solution equally wide-ranging. Because a paper machine is a sophisticated piece of equipment, there are many smaller competitors for each meter of the machine from consumables to maintenance to diagnostics to steel.

The service business side of Delta has embarked on a servitisation initiative to improve the customer experience. This initiative includes a wide range of change projects within the service organisation to reposition Delta as a business partner with a holistic solution capability rather than as a product manufacturer. The initiative is currently focused on the service business, which deals with the day-to-day customer operations, and it has not been launched at least as of yet in the new business operations, which works mainly on project basis. This research focuses on the servitisation initiative and what it means for the knowledge absorption process in terms of creating customer value.

4.4.3 Data Collection

Within Delta operations, initially two geographical regions were chosen for the research focus: Europe and SA. Europe represents a mature market for Delta where they have experience, stable long-standing operations, major customers, and they are culturally close. SA is a more recent operation which represents a growth area. The operations are still mainly small but growing rapidly, which has raised issues in logistics and support functions. It is also far removed from the Finnish HQ geographically, institutionally and culturally. There are therefore significant differences in these two areas, while sharing commonalities in that Delta wants to create services that are recognisably company-specific in all its locations, in order to create a reputation of service quality globally.

Once interview times were agreed with the customer, I also arranged to interview the KAM responsible for the account and asked them for recommendations on who they felt were the right people to interview in their local organisation. I chose to contact people based on the KAM's opinion because I wanted to make sure the people interviewed were the ones the KAM felt were supporting them and closely engaged in the customer process. These interviews took place November-December 2016 and were mostly face-to-face in customer offices or Delta's sales offices. Target number for the interviews was at least two per region. Three customers initially agreed in both areas but one in each declined later due to work commitments and unavailability. As the minimum target was reached even with the cancellations, I deemed the number acceptable to move forward with the analysis.

After a majority of the customer and regional interviews were carried out, I identified together with a high-level service executive officer some strategic and operative HQ staff members, who would have knowledge related to service development and country operations. Twelve of the most relevant people were identified and interviewed in Delta production and administrative offices in January-February 2017. None of the interviewees were senior executives, keeping with the critical realist ethos of the study that no person can provide an account of an external truth or give 'correct' answers. While senior management could provide an interesting viewpoint from the top level to what the servitisation initiative aims to do and where the company is headed, the objectives of this study were better served by interviewing respondents who are daily in contact with the KAMs or even customers themselves.

At this stage of interviews the case company and I agreed that a further region of NA should be added to the scope. I was not convinced that category saturation had been reached, especially as the cancellations had reduced the initially planned

number of interviews, and more information was needed in terms of the number of responses. In addition, having a third location gave contextual variety. The reasons for choosing NA as the location were:

- The service tradition in NA is more homogeneous than in Europe and more mature than in SA; therefore, their perspective on customer service, value and solutions can be expected to differ.
- Value creation has a long theoretical tradition in NA and much research has been carried out there in value creation. They may therefore have a better understanding and clearer difference to services as an orientation and as bundles.
- The early results seemed to indicate that there were regional context-bound differences and further comparisons was expected to provide more fruitful results.
- The region is an important market for Delta.

The NA interviews were carried out in March 2017 in customer offices, public venues and one in a Delta sales office. Initially four customers agreed to do the interview but one was cancelled unexpectedly. Because the interview schedule in NA was tight due to the customers being geographically spread out and all my flights booked in advance, I could not extend my stay in the location and the interview had to be cancelled altogether. As the minimum target number of interviews was still reached, I decided to move forward with the analysis. Figure 7 below shows the geographical spread and number of the interviews.

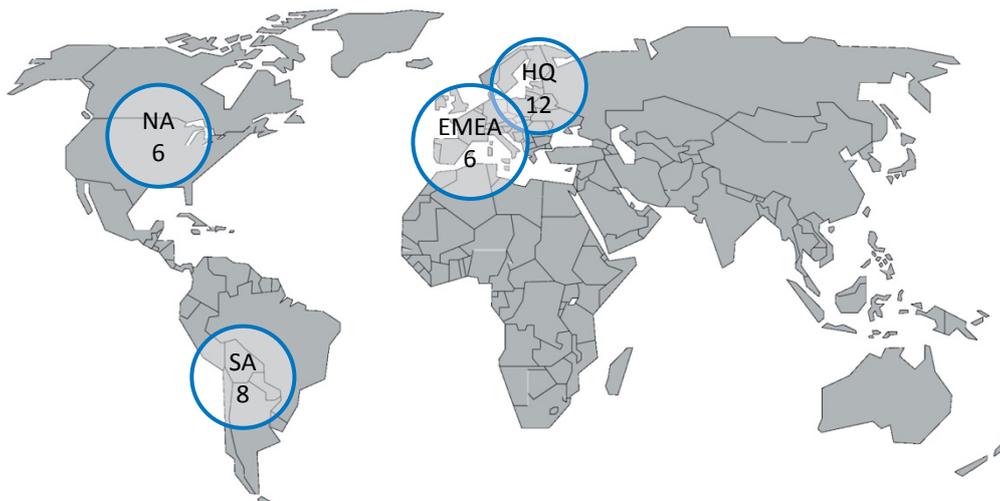


Figure 7. Map of Interviews

Altogether, I carried out 32 interviews, 20 of which were on the country level. While this was less than initially planned and certainly not enough to draw generalisable conclusions about all Delta customers (a number in the thousands), I considered it sufficient for the purposes of this research because the respondents came from a wide variety of contexts and backgrounds and were nevertheless reporting very similar issues in terms of the sensitising framework of the research. The conclusion was that a category saturation point was reached for the main concepts of the study, as the final NA interviews in the analysis phase did not add any new main nodes for the coding process. The interviews provided new information in terms of context, experiences and viewpoints, which have all formed the study, but beyond the interest of individual accounts and confirmatory power, they no longer revealed major conceptual implications. I therefore decided to determine the saturation based on the theoretical concepts that the data analysis yielded and the abductive approach I adopted for the coding meant that I could constantly juxtapose emerging interpretations with the existing analytical framework.

Saturation is a contested point in management research so I have opted to follow the grounded theory approach, which informs the coding practices of this study as discussed earlier, and take a pragmatic approach to the issue (Suddaby 2006). If the criteria for saturation includes *“the empirical limits of the data, the integration and density of the theory and the analyst’s theoretical sensitivity”* (Glaser and Strauss 1967: 62), I believe this can be best achieved by balancing the research questions, framework and data. I have attempted to do this in the Findings chapter of this work, resulting in the revised framework in Chapter 6, which is in line with the study aims. An alternative view to saturation in grounded theory research is a critical position specifically tied to the critical realist tradition that saturation can simply not be reached, as research on social issues is a constant dialogue between researchers and the social reality where the phenomenon occurs (Belfrage & Hauf 2017). However, while a continuing dialogue would be desirable and the small number of interviews is a limitation to the generalisability of the study, a cut-off point based on theoretical aims of the study seems reasonable in the context of this study.

Cuervo-Cazurra et al. (2016) state in the Journal of International Business Studies editorial guidelines that *“[a]lthough the search for a generalizable argument is the objective that researchers aim to achieve, in reality most research has limited applicability (...)”* (p. 889). Situational factors mean that few laws are truly universal and thus contextual boundary conditions limit the degree to which research in one situation can explain another. However, Birkinshaw, Brannen and Tung (2011) in the special edition editorial for the same journal point out that in

the field of international business, “*many of our researchers have deep contextual knowledge of diverse cultural contexts*” (p. 574) and furthermore, “*somewhere between the bird’s-eye view of economists and strategists, in their attempt to develop theories that apply to all organizations and societies, and the more grounded perspective of many individual-level studies lies a critical void, or, perhaps more aptly put, a missing link*” (p. 575). The approach in this study is not to look for generalisable results that would hold true in all contexts and situations, as the boundary conditions set by a single-case environment during a very specific type of organisational change initiative effectively preclude that. Rather the aim is to look at that “missing link” that connects individuals with their respective organisational contexts. This way the conclusions are borne out of the contextual environment of the case but the analysis is also transferable to how people interact with structures and mechanisms in organisations on a more general level.

For the interviews, three different question packs were devised: one for customers, one for regions and one for HQ respondents. These can all be found in the appendices. The interviews were semi-structured and the question packs were not followed strictly. Respondents were given the opportunity to diverge from the questions at will. If the respondents were specifically interested in some issue, I would concentrate on that area.

The questions for the customers and regions were shown to the HQ contact persons before going to the field and their input was incorporated in the question to make them sound consistent with the kind of language that is being used internally at Delta. The customer questions focused on customer’s experiences of working with Delta, including their definitions on what is value and what value does working with Delta bring them. Main emphasis was on examples of working together with Delta and reflecting through these stories how the co-operation was experienced, how the partnership has developed, and what kinds of things are important to the customer.

The regional questions were divided in two parts: Co-operation with customer and co-operation with internal staff and structures. Similar questions as to the customer were asked the KAMs to assess the expectations and viewpoints of both sides of the dyad. Furthermore, the KAMs and support staff were asked about their experiences in working with staff from abroad, the support they need, and how they can access that support when necessary. Again, the respondents were asked for examples of situations where they needed additional resources to serve the customer and how the processes worked in that situation.

Finally, the HQ questions were also divided in two parts: Getting knowledge about the regions and providing support and actions towards them. These were

approached through the respondents' own work tasks and in the HQ the questions were also partly focused on personal experiences, partly on the kinds of systems and processes that are in place for formal reporting or processes.

While care was given to provide the respondents the freedom to talk about issues they felt were meaningful and important and allow their own voice to shine through, this is not an inductive study and the aim was to focus on specific aspects of the organisation, namely knowledge absorption in the context of servitisation and value creation. In an attempt to steer the discussion towards these topics but not to force it in predetermined lines, I chose to ask specific questions with words "value", "service" and "knowledge", but not include the concepts "knowledge transfer" or any of the names of the knowledge absorption phases as acquisition, assimilation, transformation or exploitation. To get deeper in the meanings of the concepts I named, I asked follow-up questions during the course of the interview but phrased them differently, e.g. "What do you expect when you deal with a company like Delta?" or "What benefit is it for your company when a vendor does X?" This way I tried to get the respondents to express their experiences using the vocabulary that felt natural to them.

In line with an abductive approach, as data was amassed the research focus was also tightened. While the basics of the research were constant across the interviews (e.g. what is value? What is service?), some of the questions were changed to reflect new learning about what is important in the context. Because the interviews proceeded from one region to another, there are some differences based on area. The first respondents were from EMEA and it became obvious from these interviews that internal networks played a great role in KAMs daily life while resources and access to expertise introduced limitations. These were consequently focused more on in the SA interviews. The next patch of interviews were carried out in the HQ where it became clear that digitalisation is an important focus area for Delta and though this had not risen up noticeably in the regional interviews, evidence of this was possible to discover with the HQ data established. These questions were made explicit in the NA interviews, which were added because there was a need to complement the information so far gathered. Thus, the content of the interviews saw some changes in focus and the level of explicitness, or as Gioia et al. (2012: 6) phrase it: "*We follow wherever the informants lead us in the investigation of our guiding research question.*"

There was also a noticeable change in my own knowledge about the industry, the company and the machines. During the first interviews I was not familiar with how paper machines work or how much work is put in them, despite the fact that I had tried to familiarise myself through secondary sources such as the company website

and material they produce, primarily the customer magazine. The respondents told me technical details about the equipment and general information about the industry that made my consequent questions much more focused. One such example is the recurring problem with the shrinking talent pool as people retire and young people are less likely to get specialised education in paper. After this came up in one interview, I raised it in the consequent ones if it was not spontaneously mentioned and thus got comments that were specific to it. It is possible that these would have been evident in the earlier interviews as well, or that there are issues that I missed by virtue of not having the knowledge base to ask for them explicitly. However, as the point of the research is not to draw generalisable conclusions about what all the customers think or feel but rather to uncover forces and factors and follow the data, making such changes as new information is unveiled is keeping in the approach of the study's foundational premises.

All the interviews were carried out face-to-face in a location of the respondent's choosing. While these were mostly office spaces, some of the interviews with KAMs were in restaurants and hotel lobbies as the regional offices can be far away from the customers. While these interviews had some background noise, the locations were still suitable for a one-on-one discussion and this did not influence the length of the interviews. Most customers requested the interview to last no more than an hour and their wish in this was always respected.

All the regional interviews were carried out in English, which presented issues when the customer's English was not so advanced that they could easily discuss the somewhat abstract concepts of service and value. On two occasions the KAM joined the interview and was able to translate and clarify the questions to the customer's language. The Delta personnel in both instances did not join the discussion beyond translation.

It is possible that the presence of the KAM in the interview influenced how the customer responded. However, as it is in the customer's own best interest to share knowledge about the issues asked with the KAM, it is unlikely the influence would be so great as to alter the underlying message of what was being said. Furthermore, though I promised all the customers that I would not reveal their names to the Delta under research anonymity, all of them waived this right and told me that the discussion had been about things they would want Delta to know or had already discussed with their KAM. As such, it is unlikely that the presence of KAM in the interview had a major influence on the course of the discussion. It is however possible that the way the customer phrased issues was influenced by the presence of a Delta representative. This could show either as the customer wanting to sound

more positive and reinforce the KAMs position, or to take the opportunity to highlight the negative. As the content in both interviews ranged from successes to problem areas, my assessment of the situation is that the words and tone may have been influenced, which might present a problem for narrative analysis, but the impact on content is small enough that the two cases can be analysed in the same data set and manner as the rest of the interviews.

All the HQ interviews were in Finnish and they were transcribed and analysed in Finnish. I translated the chosen extracts myself but as English and Finnish are very different when it comes to sentence structures and idioms, it was not possible to do this verbatim. Instead I opted to translate in a manner that best conveyed the meaning of the extract in the context. Thus I accounted for the content of what was being said but also the non-verbal messaging. For example, here is a Finnish extract from a HQ respondent followed by translation verbatim, followed by translation where I have interpreted also meaning:

Se on taas se sama asia, että se on meidän pullonkaula: Meillä ei ole tarpeeksi niitä niin kuin kavereita jonka voi heittää kolera-altaaseen ja ne alkaa uimaan Ja sillä lailla tämä homma nyt vaan tänä päivänä pelaa. (Finnish)

It's the same thing again, that's our bottleneck: We don't have enough of these, like, guys you can throw in the cholera pool and they start swimming. And that's just the way this task plays out these days. (Verbatim translation of above)

It's the same thing again, that's our bottleneck: We don't have enough of the guys you can throw in the deep end and they start swimming. And that's just the way it goes these days. (Translation with interpretation)

As these extracts show, I have opted to translate the Finnish phrase “cholera pool”, a pool of water in Helsinki notorious for people dropping waste in, because the Finnish version is only understandable for Finnish people, while the meaning being conveyed is the same as in the common English phrase “to throw someone in the deep end”. I have also removed some repetitive words (such as “like”) that convey no meaning and changed the verb “to play” into “to go” or “to get”, as the Finnish usage of “to play” refers not only to games or competitive situation but also generally events occurring. Finally, I have streamlined reference to “this job” simply as “it” because the Finnish way of assigning agency to a concept (here: “task”) means that the emphasis is not on the person doing the activity but rather the situation. In this context specifically the respondent emphasises that the problem is the fact that there are currently not enough people available. This meaning can be achieved in English by using the impersonal actor “it” as a proxy

for an active actor. I made similar modifications in the other extracts but this is one of the rare instances where a whole phrase (cholera pool) was changed.

I did not ask a second person to do the translation because the comments were made in the context of the whole interview content and the personal relationship and communication style we established with the respondent. Thus, I believe that a second person would not have been as well able to understand what was meant in the context. Table 9 below summarises the data collection activities.

Table 9. Interview Data Collection

Regions	Number of interviews	Position of interviewees	Interview length variation	Transcribed pages
Finland (HQ)	12	HQ staff	1h 14min - 2h 01min	152
EMEA	6	2 Customer 2 KAM 2 Support staff	1h-1h 32min	60
SA	8	2 Customers 2 KAMs 4 Support staff	40min - 1h 43min	49
NA	6	3 Customers 3 KAMs	57min - 1h 32min	70

As discussed previously about rigour in a case study, quality in a research can be pursued through reflexivity of one's own biases. In that vein, my cultural background as coming from Finland may have influenced my approach to the interviews and the findings. I decided to carry out the interviews personally at the locations rather than over phone or video because I believe that the interaction provides more non-verbal clues to overcome or mitigate this bias to the degree that it is possible, and provides a richer foundation for the analysis. In some facilities I was given a tour of the operations and with some respondents I had dinner or lunch and socialised informally after the interview, gaining more insights and context for how they viewed the industry, the company, and their role in it. Thus, I would venture that while these personal experiences might confer some bias, their net value for understanding the research findings in context are far greater.

4.4.4 Analysis of Emergent Themes and Coding

The NVivo software was used to analyse the interview data. NVivo is qualitative data analysis software where rich text or multimedia can be coded and analysed. As software, it is capable of processing large amounts of data and queries can be run based on the interview metadata, substance or cross-linking both.

The three main software packages for qualitative research are NVivo, ATLAS.ti and MAXQDA. While several others exist, these three currently seem to provide the most support, although software development is a fast-moving industry so such considerations are liable to change rapidly. All of them are capable of handling large amounts of data and operate from the same logical bases. The choice of software is therefore as much an issue of personal preference for the user interface as it is for the internal capabilities of the system. Because I wanted to incorporate long quotations from respondents, I decided on NVivo based on their marketing which emphasises the capabilities of handling narrative data. While the other packages would undoubtedly be also capable for this purpose, their focus seemed to be divided on a mixed method approach of numeric and verbal data, while NVivo is (or was, at the time of choosing) for example the only one offering a word clustering tool.

The logic of NVivo is eminently suitable for the use of the Gioia methodology of analysis, both of which are based on the logic of grounded theory. In this study I have applied the Gioia methodology for the coding but on occasion only loosely. This is due to the fact that there are some significant differences between grounded theory and critical realism, even if they are not mutually exclusive to the degree that practices could not be interchanged.

Traditionally, grounded theory assumes a much greater degree of induction than critical realism, which makes no such limitation. The Gioia methodology specifically prevaricates that the researcher should not have an exhaustive knowledge of prior literature that might put blinders on their worldview and limit their approach to the data (Gioia et al. 2012). While my research has a theory-driven framework, it acts mainly as a sensitising framework that provides a structure for the study within which new knowledge can emerge. Thus, while I have familiarised myself with the literature extensively prior to the fieldwork, I have endeavoured to be guided by the data in the ways the framework works and what kinds of things influence it. As such, I believe that it is possible to apply the Gioia method even if the work is not inductive.

Grounded theory tends to also emphasise a more constructionist worldview with an interest on social actors and their interactions and relationships (Glaser &

Strauss 1967). It does not therefore seek an understanding of reality verifiable by testing hypotheses (Suddaby 2006). While hypotheses are not in keeping with the critical realist tradition either, it does maintain that there is an external truth, if elusive. Though in terms of philosophy the difference between a socially constructed reality and a socially constructed understanding of reality can be great, in terms of coding it does seem somewhat arbitrary. I therefore commenced the coding with the aim of understanding what people thought and felt about an underlying phenomenon that they had a shared concept for as members of a social community.

The first step in coding the data was transcribing the recorded interviews to text. I chose to do this task myself rather than employ a paid service because it allowed me to go through the data line by line, word by word and thus gave me a great overview on what had been said. I also did not want to show the data to a third party who had not signed a non-disclosure agreement as in this stage I was still uncertain how much confidential information there might be in the text.

The next step was to go through the data again in NVivo and start creating in vivo codes based on the respondent word choices. However, as the interviewing and the analysis proceed in tandem, separating them completely seems an artificial premise (Lincoln & Guba 1985). In my interview pack I had questions relating to specific areas of interest, so separating these from the coding did not seem reasonable. To ask: "What does value mean to you?" is to assume the answer will contain the word "value" in some form or another, and so the transparent coding method seemed to be to input value as a node from the outset and let the native categories rise as sub-nodes within it. The same was done for "service". For the four phases of the absorptive capacity I inputted them as separate nodes from the outset and then coded every passage that seemed to relate to them under the pre-set nodes and also under a native category if one emerged. This added the number of nodes but allowed me to go back after all the coding was done and compare the native categories with the pre-set nodes to see if there was a natural fit.

After the first round of coding was done I was left with 96 nodes altogether. I then started comparing the theory driven codes I had pre-set with the native categories and seeing if matches could be found. Here I used a two-pronged approach. On one hand, if all or the majority of the extracts coded under the in vivo codes were the same as under a theory driven code, I assigned them together. If, however, there was variance, as there mostly was in terms that the extract was coded on the native category but not on any of the theory driven, I made the choice to assign the native category based on the subject matter relationship. Categories referring to relationships between customers and KAMs were either acquisition or

exploitation, based on whether the topic was about getting information from the customer, or about the customer's willingness to buy or engage in a deeper level of partnership. Relationships between regions and HQ were assimilation or transformation, with the former relating to specific knowledge transfer within the relationship and the latter on activities in the HQ.

This exercise after several iterations yielded the data structure, which is used in the findings chapter of this study. Under each phase there is a varying number of structures and mechanisms, some of which are contingent and others necessary, which the respondents have identified as influencing knowledge transfer. These are discussed in terms of the servitisation initiative and its aims at increased value creation opportunities for the customer-KAM relationship.

However, coding has been criticised for removing the lived experience and complexity of the respondent from the extracts, reducing at worst the analysis to a straightforward checklist rather than the account of a person it is a part of (Alvesson & Gabriel 2013). This has been especially highlighted as a risk when using software tools for the analysis, in which case the importance of understanding the data beyond the codes and keeping an open mind set for viewing data from many viewpoints is recommended (Silver & Lewins 2014: 18-19). To avoid the pitfall of merely reporting constituent parts that summarise the interviews, the final sub-chapter in Findings and Discussion aims to link the discrete parts of the process to a more conclusive whole, explaining the interplay between the personal and the organisational.

5 FINDINGS AND DISCUSSION

In this chapter the main findings of the study are discussed on the basis of the theoretical framework presented earlier. First I will go through findings related to how different actors in different locations interpret service and value. This provides a basic understanding of the complexity of the international environment in which servitisation occurs and also why there may be issues in the process. Building on that, I will then focus on the relationship between customers and salespeople and the implications to service development that knowledge transfer has in these relationships. This I will then contrast with the relationship between the subsidiary and the HQ and the structural processes that are included in the process. Finally, I will look at the process as a whole in the context of servitisation to illustrate the implications.

5.1 The Different Faces of Service and Value

Delta sees itself very much as a product company. Its market position is based on its long-standing reputation as a producer of reliable, quality equipment and the Delta brand is built on its capability to provide extensive product lines fit for purpose. Internally, the company operates in business units and expertise is developed within the units relating to specific machines and their applications. The product is the heart of the Delta offering, and service acts as the veins and arteries of the offer in terms of projects and after-sales.

There are structural and operational implications of the division between projects and after-sales. Projects are part of the capital business and relate to the installation of new equipment and ensuring that it works as planned. They are targeted based on sales volumes and resources are allocated accordingly. Because new equipment in the paper industry tends to be expensive and installations are large-scale, projects are often given priority in terms of human resource availability, and project managers are given project teams consisting of field experts.

In many ways a project is an ordeal by fire. To get everything working seamlessly the project manager must make sure that parts from different units and suppliers arrive as needed to the site and are the right ones. As many of the parts are tailor-made, this is a challenge. The efficacy of the project can be clearly measured: If the start-up is successful and on time, the project has worked. Any other result is a failure. In comparison, after-sales is day-to-day work based on long-term relationships and continued orders with values a fraction of a project.

There are thus two very different ways the customer experiences Delta service. Projects are the traditional main focus of the Delta offer where resources are readily available, a rotation of experts make visits as needed, and outcomes are easy to measure within a warranty period. After-sales, on the other hand, are relationship-driven, difficult to measure, and continuous. This work focuses on after-sales but to understand the customer view on service and value, it is necessary to know that the customer evaluates Delta on the basis of their experiences in both.

5.1.1 Customer Interpretations

A common element across all the customer interviews is that service is primarily interpreted as an after-sales concept. While there are mentions of project work especially in terms of service quality, most references to service are in the context of daily operations.

So the main expectation, the first thing, is daily operations. If we have problems, we need to solve them immediately. So if I need help, I have to have it immediately. Whatever the problem is, I have to have it immediately and they have to be able to solve the problem. (Customer, EMEA)

Firefighting or fixing problems is seen as a sort of necessary evil: many of the customers indicate that they would want to focus on optimisation of operations over the long-term and plan for the future but they are mired in solving current issues. Under the circumstances, service is seen as timely and accurate help and support.

To me, service is an answer or a reply whenever we have a question. Accessible all the time. Service is to know who is my contact at the time when we need a solution. In a good service the focus of the supplier is not only in selling the product but he can also help you in the process or maintenance. (Customer, SA)

In terms of my project needs, service is that when I need to talk to someone I'll get an answer. Quickly. Or if we are looking to do this or that in the future, service would be to get in touch with an expert and get an answer relatively quickly for yes or no we can do that, and roughly what the costs are. (Customer, NA)

Obviously they need to analyse the costs and make sure that the costs are competitive. But it is timescales, really. It's about being able to deliver a piece of equipment on time. They've got big lead times, as much as everybody else, but that would help. And dare I say, what I was talking about earlier, having a clear structure. So that people would know, even for [the KAM's] sake, who to talk to. It is difficult to find the right people to talk to. They are always

restructuring, they are always changing people, and that is not a problem provided that you know who you can contact and talk to you. (Customer, EMEA)

The other facet of service is the future-oriented approach as customers express a clear desire to utilise Delta's knowledge base and international reach to optimise their own operations. Where service definitions related to firefighting emphasise speed and accuracy, definitions linked to forward planning are much more likely to mention knowledge, analysis or the relationship as significant factors.

I think at the moment we have that kind of relationship. Delta gives us support when we try to analyse what is going on with our machines or what kind of upgrade can we try to get in a specific mill. We are working together. Even now in the mill Delta is analysing how to manage a machine from another vendor and we receive that feedback. (Customer, SA)

I've sat down with vendors before and said I'm going to [...] give the sales to the one that gives me best service. So the guy who is here on my shut-down looking at my rolls and inspecting and giving me a good report telling me what rolls need changing and what the status is and helping me out, that's the guy I'm going to do business with. (Customer, NA)

*Service is really when we have machine clothing and then there are the dedicated people from Delta and they're coming to do the measurements, so just evaluating the condition of the running machine clothing and we can then draw conclusion how long we can still keep it in the machine or if it's affecting the quality of the paper, so they are bringing the service. **And not only measurements because we can do that ourselves, we have the equipment; the point is how to draw conclusions from the measurements.** Because everyone can measure, but to interpret the results, that's a different story. (Customer, EMEA)*

No great regional variety was evident in how customers view service and the two timescales, short-term and long-term, emerge to different degree in all the customer interviews. Table 10 shows what elements are grouped together under each perspective.

Table 10. Customer Interpretations of Service

	Firefighting (Short-term)	Future planning (Long-term)
Need	Support	Teaching and advice
Related area	Technology	Human resources
Critical factor	Speed of response	Knowledge
Critical ability	Problem-solving	Proactive solutions
Limiting factor	Cost	ROI
Goal	Mitigate risk	Increase profit

Firefighting services are about offering immediate, usually technology related support and the critical issue is to get to it fast and get it done. Because this is not seen as a value-adding activity, cost is an issue that many customers raise in relations to it. This contrasts with future planning, which is a need for formal and informal teaching and advice and relates to personnel issues, especially because the paper industry is going through serious upheavals and competent human resources are becoming ever the scarcer. The critical factors in long-term planning are Delta's industry and technological knowledge and their ability to identify proactively improvement areas, and thus optimise the customer's current investment stock. Because future planning is seen as a value-adding activity, the limiting factor is the expected return on the investment rather than cost.

The interpretations of value in the customer sphere relate closely to mitigating risks through the knowledge assets Delta can call on to help the customer. These assets in terms of technology, industry, and the quality of products are repeatedly raised up as the strength of Delta. In itself, this is somewhat contradictory because on one hand customers are naming technology as the value they are receiving and the reason why they would select Delta as a vendor, but on the other they are prioritising service and relationships and find the main vendors largely comparable in terms of their technological competence.

One explanation for this contradiction is that the industry in general is very product-oriented and the customer contact persons tend to have an engineering or technical background. The following two excerpts are an answer to the question "How would you define value?" and they show that customers feel comfortable to start talking about value in terms of processes and technology, but this is merely a stepping stone for underlying factors:

*It's new technologies. It is the R&D that they do. They do their own research and development and they are obviously developing new machines with different partners all over the world. **So it is about that knowledge transfer and their ideas on where the market is going as well.** (Customer, EMEA)*

*For us, principally, [value] is the **experience and know-how in the process** and Delta are an important player in the market. So we know we are working with the leaders in the market. (Customer, SA)*

In the first excerpt R&D is seen to lead to learning from international markets that the customer can utilise as market knowledge. The second ends up prioritising the reputation of the company and the security of working with a market leader. Thus, it seems that technological excellence is the expected baseline and the real value comes from leveraging the benefits of having that knowledge resource. The customers assume that by working with Delta, they have access to the Delta knowledge resources across the board:

*Delta is big and supplies machines all over the world so of course they have a big database, a lot of references. So **whatever problems we are facing here, I'm sure they've already faced it somewhere else.** Because we have one machine but they've built thousands. (Customer, EMEA).*

Thus, from a customer perspective, service is a variety of knowledge-based actions necessary for sustainable production performed by the vendor and aimed at either fixing current problems or improving operations, but while inability to deliver the former efficiently can destroy the perception of value, only the latter is seen as a value-adding activity. While service definitions concentrate on actions performed in the context of business, value definitions also encompass trust and relationship issues, couched in terms of reliability and risk avoidance. While customers require the latest technologies to improve their business, most of the big players in the industry can provide machines of comparable quality for there to be any differentiation value in equipment alone. Thus, customers look to vendors for reassurance of their ability to solve problems in daily operations to bring down risks and partnerships to co-create value and increase profit.

5.1.2 Subsidiary Interpretations

Because the local support staff interviews were carried out with the after-sales organisation, the focus was on after-sales alone and not on projects. The perception of service by the local staff includes short-term and long-term issues similarly to the customer but the main difference is on the emphasis. While the customers view problem solving as the norm they would expect working with an

established partner, the local staff see a fast response to daily issues as the crux of the service offer.

This difference can to some degree be explained by organisational structures. The KAM role specifically aims at supporting customers in their daily life while the rest of the local organisation largely supports the KAM. Technical expertise, innovation and analysis are not primary requirements for the role as much as relationship building, facilitating and conveying information between the customer and the company. As such, the KAMs put much larger emphasis on reacting to expressed needs and fixing them rather than proactive issue identification.

To me that is really the essence of services. If you have a problem, just pick up the phone and call someone and then forget about it, go back to your summer cottage or wherever you are. Delta will come in and fix it. They will do it rapidly, they will do it in your language and they will do it to full satisfaction. (Support Staff, SA)

When you get a call or an email from the customer you try to respond as soon as possible with the resources you have, you try to put yourself in their shoes and resolve the situation together with them. Because I believe that that is the main thing that they want to feel from Delta. (KAM, SA)

Recently we have been doing a lot of work on shutdowns, basically just going in acting like an invisible person trying to see what we could do better, what the customer could do better, and what third parties could improve. Basically just trying to offer a better service. It's only something that we have started doing quite recently and I don't know if it's only here. (Support Staff, EMEA)

(Service is) [v]isiting the mills regularly, listening to their needs, understanding their needs and giving proposals that fix that need, really. (...) [W]e have to earn our business by maybe coming in and auditing rolls or auditing the machine, looking at parts that may be in poor condition or something. That to me is good service, responding to their needs and giving them extra. (KAM, NA)

A regional difference is evident in the service definitions in that SA respondents emphasise problem solving and responsiveness while EMEA and NA respondents include a more proactive approach as being better service or something extra. The SA operation is a growing area and in many ways understaffed. It is very likely that the current organisation cannot spare additional resources for activities that do not lead directly to purchase orders, and the current resources are fully engaged in firefighting. Thus, their primary goal is to ensure the customer is satisfied and the equipment stays up and running. In EMEA and NA where the customer relationships are more established, support organisations are mature and include

some slack resources, and the servitisation message has been communicated more, the perspective on service includes diagnostics and monitoring to a greater degree.

All the local respondents highlighted the importance of personal relationships. This is expected as the job of this group of respondents is relationship-building and also because there is an internal implication that having a good relationship with a customer is a status factor for the KAM. Many of the KAMs in EMEA and NA also expressed pride about being accepted in the customer sphere, such as being given their own key cards to enter the highly secured facilities without invitation or having the right to walk around the customer premises without an escort. In SA such attitude was not evident but this might be because the operation is younger and thus the customer relationships are also more recent. Given time it is possible that a similar sense of ownership of the customer operation may become more visible there, too.

The local staff is in a position where they have to balance customer requirements with the capabilities and realities of the internal organisation. *“So we use the Delta name because there is a good infrastructure if they need an expert, if they need anything to do with paper mills or paper rolls or paper machines, they know that Delta has the background or the infrastructure behind it to support any projects that they have going forward,”* (KAM, EMEA). This puts the KAM in a crucial position as the person who is aware of the customer’s long and short term objectives and knows what the company can do to respond to those. At the same time, it can also lead to value definitions based on what Delta can offer rather than looking at the customer needs in isolation. This might explain to some extent why the local staff prioritise Delta capability to respond to issues as higher value than the customer seems to do.

5.1.3 HQ Interpretations

The HQ respondents’ perspectives on what service is are generally wide and all-encompassing. Half of the HQ interviews included words such as “everything”, “all” or “entire” in reference to Delta’s service offer. The HQ staff interviewed have no or limited customer contact so the perspective is understandably from a bird’s eye view and with a clear emphasis on services as deliverable, measurable products. While several respondents identified interaction and responding to customer needs as elements of service, these are couched in terms of deliverables provided for the customer, rather than co-created with them. Table 11 shows all HQ responses to the question: “What is service?”

Table 11. Summary of HQ Definitions of Service

Service as a Product or Process, or Customer Interaction with Products or Processes.

Service is really everything we do for the customer, everything we deliver to the customer.

So I would say service is taking care of the customer, the customer relationship. And then inside that there are different kinds of products, whether they be service products, projects or otherwise.

If we think about our product portfolio or offer portfolio, it can be physical items, components or whatever products. But I would see increasingly in the future it is also knowledge management. Capabilities in finding and processing information. Or then applications and different kinds of systems.

Delta delivers both products and service products but a machine delivery can also somehow be a service for our customer. Everything that customers buy from us – so from delivery to sales process and onwards – is service. And after delivery there are after-sales. So it's a continuous cycle. Really it's like the interaction between the customer and Delta.

It's pretty wide, so it's not just this service business, product portfolio or service portfolio. The way I see it, it's all the interaction Delta has, that Delta personnel has, with the customer. I also think that in the modern world these digital platforms are also one way of providing service.

Service is that you deliver good products, good services to the customer, this kind of technical support, business support, and that you can also give the customer this kind of long-term perspective.

I think it's the entire package that makes life and activities and conditions easier for the demand side. Easier. That's service. Sure it comes from many things and as a whole. It's not about delivering a ridiculously good gadget but if the gadget arrived after a lot of hassle and six months late then it didn't make life easier but mostly just more difficult.

Service as Customer Value or Response to Customer Needs

Service is something that creates added value to what you would otherwise get from many sellers.

I would define service (...) like in a concrete way and on the level of action that we help the customer with their needs, and good service is when it leads to the customer wanting to do stuff with us the next time and continue co-operation.

It's everything. Everything someone might need, we can deliver. We have of course defined limits to our target market so we don't for example bake buns. But service in the wide sense means the same thing that we create value for the customer, make life easier for them in their own markets and own environment by offering the things they need and are willing to pay for.

Some people think all after-sales are service business. Maybe that's it. (...) So serving the customer with the needs the customer has to run their business with the machine base they have purchased. Ensuring the sustainability of the customer's activities and business. As for what the needs are, whether it's expert help or spare parts or small improvements or consumables... everything the customer needs so that the whole thing works at the factory.

Service is that we should row to the same direction with the customer and more precisely it is that it's inconsequential how we price things as long as the customer earns the money back and then some for themselves; then they will also pay us. It's pointless to offer anything the customer can't transfer to their own balance, so either lower production costs or increase production so something where they earn the investment back. The only purpose of service is for us to do better cheaper and we increase the sum total of money available for the customer.

The HQ perspective on service is largely omitting the daily operations, although this seems to be incorporated in the sentiment of making life easy for the customer. Services are primarily seen as new offers or value propositions that can lead to tangible benefits to the customer. The HQ perspective is thus much more focused on increasing profits, in stark contrast to the customers' primary concern of mitigating risks.

In terms of value, there is more variety in the responses. Customer's productivity or increased profits garners most mentions, followed by Delta expertise and trust. The variations on the HQ perspective in relation to customer or local staff can have different reasons. For one, all the HQ respondents come from Finland, and Finnish

respondents seemed to have a cultural disposition to being comfortable discussing hard, tangible values over soft, intangible relationship issues. The service culture in Finland is not particularly well developed and especially in a traditional industry such as heavy machinery the industry vocabulary is likely to be dominated by measurable values.

Secondly, the customer respondents were answering to the interview questions from their own personal viewpoint, which may differ from the ultimate purchasing decisions they make as a customer company. Therefore, a customer respondent may prioritise a close relationship, trustworthy brand, or easy access to a helpline, but the purchasing decision is ultimately made by financial pressures due to restrictions or demands laced by upper management at the customer organisation. While local staff are familiar with both the personal and corporate decision-making processes and must juggle both when making offers and co-operating with the customer, the HQ staff is likely to see only the end result of whether the customer chose Delta or not.

In summary, there are differences in customers, local staff's and HQ staff's definitions of service and value. While the differences are not so great that they would make communications or co-operation impossible. Understanding them can explain some of the social structures underlying the relationships between the parties. The next section will focus more on these relationships and what they mean to value creation in the context of servitisation.

5.2 Knowledge Transfer in Dyads

For the most part the responses and analysis are reported on a regional level to preserve the anonymity of the respondents and to connect the individual level to the corresponding regional units. Here, however, I am investigating each of the seven customer-KAM dyads separately to detect differences and unique properties in them. To connect the findings to the literature review, I am using the framework provided in chapter 2.4.3 to illustrate the properties of knowledge, properties of sender and unit, and properties of the relationship between the units (Argote, McEvily & Reagans 2003) in relation to the phases of absorptive capacity. These are provided in tables 12 to 15 below.

Table 12. Knowledge Transfer in Dyads: Acquisition

Dyad	Properties of Knowledge	Properties of the Unit	Properties of the Relationship
1	Customer prefers problem solving and response.	Subsidiary regionally wide. KAM management in discrete locations.	Long relationship with major projects. KAM used to work for the customer.
2	Multivendor approach. KAM knowledge seeking ground up approach.	Subsidiary handles most local support. KAM far from local office.	Long relationship with major projects. KAM used to work for the customer.
3	Partnership approach. Wants proactive vendor to analyse & offer solutions.	Subsidiary is developing operations. Challenges for time and responsibilities for KAM.	KAM new at the role, used to work as a customer. Customer has strong links to other actors locally.
4	Customer seeks greater integration in processes so knowledge transfer can be more forward looking.	Subsidiary is developing operations. Challenges for time and responsibilities for KAM.	KAM new at the role, used to work as a customer. Technical background before moving to sales.
5	Customer wants advice and to work together to combine knowledge for solutions.	Support available locally. Geographic distance means contact is largely over IT systems.	Long standing relationship with a strong element of personal fit. KAM used to work for the customer.
6	Customer wants specific knowledge pertaining to the machine. Prioritises proactive service.	Support available locally. Geographic distance means contact is largely over IT systems.	Customer is very new in the current company and role, though has worked long in the industry.
7	Customer wants a communicative account management style with evidence of value creation.	Support available locally but co-operation regionally as well. Close contact within local office.	Problems with projects influence the relationship. Good, long-standing KAM relationship.

In terms of acquisition the knowledge needs of customers are largely similar but vary on the emphasis the respondents give on the relationship and proactivity. This is not meant to imply that any of the customers would not want support or solutions but there are differences in the perspectives on what the role of the KAM is in providing these and how the relationship dynamics function. For example, dyads 5 and 6 take place in a very similar context on the unit level but the customer relationship and knowledge requirements are very different. These differences are partly due to personal preferences and partly because the customer operation and Delta's historic involvement have developed differently. Conversely, in dyads 3 and 4 there are similarities in the responses across the line: the customers' knowledge requirements are similar in seeking partnerships and greater integration, and the KAMs come from the same local organisation. A shared cultural background and

the newness of the operative environment may therefore have a greater bearing in these occasions than in the other dyads.

Table 13. Knowledge Transfer in Dyads: Assimilation

Dyad	Properties of Knowledge	Properties of the Unit	Properties of the Relationship
1	Technical support, problem solving, solutions development	Mature subsidiary. Geographically scattered matrix management.	Strong internal networks established through close HQ co-operation
2	Technical support, problem solving, solutions development	Mature subsidiary. Recent changes in management.	Country operation peripheral in network but strong historical ties
3	Technical support, problem solving, solutions development	New subsidiary in a growing market. Developing local talent.	Long geographical and cultural distance with time difference
4	Technical support, problem solving, solutions development	New subsidiary in a growing market. Developing local talent.	Long geographical and cultural distance with time difference
5	Technical support, problem solving, solutions development	Strong local operation	Balancing between self-sufficiency and getting support
6	Technical support, problem solving, solutions development	Strong local operation	Acquisitions means some actors used to work for local HQ, now subsidiary
7	Technical support, problem solving, solutions development	Diminishing market but opportunities available in scope changes	Country operation peripheral in network, operates more regionally

In the assimilation phase certain uniformity in the properties of knowledge is clearly evident. This does not mean that needs or requests would be similar as for the most part they are highly specialised and need tailoring. However, the emphasis for all the respondents is primarily in getting technical support or immediate help for issues and secondarily on getting expertise advice on putting together complex solutions. Assimilation of market knowledge or general level customer knowledge is not shown in the responses, so the conclusion is that such knowledge is transferred informally and is hard to access deliberately, thus supporting the description of knowledge as “sticky”.

The variety in knowledge properties in the acquisition phase is not equally reflected in the assimilation phase. This implies a risk of path dependence. While unique contexts and needs drive the customers’ knowledge seeking activities and

servitisation is aimed at responding to these better, the KAMs and subsidiaries operate in the same structures and with the same mind set. Thus, they will seek knowledge for problems that have consistently been issues, and consequently transfer knowledge through same networks about the same matters.

Table 14. Knowledge Transfer in Dyads: Transformation

Dyad	Properties of Knowledge	Properties of the Unit	Properties of the Relationship
1	Formal systems, expertise, organisational change	Complex management network across the region	Close ties and opportunities to train
2	Formal systems, expertise, organisational change	Local unit fairly homogenous	Close ties and opportunities to train
3	Formal systems, expertise, organisational change	New unit developing identity and competence	Require expert support to develop opportunities
4	Formal systems, expertise, organisational change	New unit developing identity and competence	Require expert support to develop opportunities
5	Formal systems, expertise, organisational change	Preference for local operation	Balance in sending and receiving knowledge
6	Formal systems, expertise, organisational change	Preference for local operation	Balance in sending and receiving knowledge
7	Formal systems, expertise, organisational change	Preference for local/regional operation	Require modifications due to market characteristics

Again it is evident that the properties of knowledge are similar across the line. However, while it is surprising that there is little variety in the knowledge transferred from subsidiaries to the HQ (assimilation) due to the varied contextual factors, it is only to be expected that the HQ would transfer similar knowledge across the subsidiary network in response (transformation). This is because the HQ operation seeks standardisation in responses that will lead to operational efficiencies. Larger initiatives such as the servitisation initiative are naturally rolled out globally, as are formal systems such as global spare parts ordering systems and integrated IT systems.

The main differences are therefore in the non-formalised responses and expertise network. The experts themselves can act as evangelists and spread knowledge as they visit from location to location. However, transformation requires also acceptance from the recipient and here unit level differences can make an impact. In dyads 1 and 2 network centrality provides communications opportunities and an easy reach for training even on a face-to-face level. The more complicated

network structure in dyad 1 context can complicate transformation as messages are transferred across organisational levels. Yet the ability to talk to people personally and leverage existing relationships is influential in securing acceptance. This is more challenging in the geographically more distant locations.

In dyads 3 to 7 the relationships on a unit level are important for the transformation readiness. Dyads 3 to 4 operate in a context of greater dependence on the HQ through learning and expertise, as the unit is still developing an identity and building legitimacy. Dyads 5 and 6 are in a stronger position through their local knowledge resources and therefore transformation acceptance becomes more sensitive to the balance of how much the subsidiary sends and receives transformative knowledge. In dyad 7 this is not as evident, even though they operate largely through the local support network, partly because their market conditions require some enhanced modification and support from HQ level.

Table 15. Knowledge Transfer in Dyads: Exploitation

Dyad	Properties of Knowledge	Properties of the Unit	Properties of the Relationship
1	Technological innovations	KAM embeddedness in customer and company	Customer proactive in knowledge seeking
2	Technological innovations	KAM as a sales & technology representative	Customer approach competitive & multivendor
3	Process innovations	KAM as a vendor representative	Multiple relationships ranging hierarchically
4	Process and operational innovations	KAM as a vendor representative	Multiple relationships ranging hierarchically.
5	Technological innovations, health & safety	KAM as a partner	Reciprocal knowledge sharing
6	Technological innovations, analysis & diagnostics	KAM as facilitator for expertise	High expectation for proactivity
7	Technological innovations, analysis & diagnostics	KAM as facilitator for expertise	High performance needed to surpass past issues

Exploitation on the individual level shows again more variety in personal attitudes. Dyad 1, for example, differs from the others in how the customer respondent shows a clear preference to seek knowledge through a variety of online resources and social media, and get the personal presentation only when they are specifically interested in something new.

So, really, to come and present, it's when I want it because I'm interested in something. But not to tell me that someone has developed something because this is now quite easy to know.

This means that exploitation of new ideas must be presented to this customer differently than in the dyads where the customers expect the KAM to present such information formally on a regular basis. Again, this does not mean that the customer would not be interested in the latest developments but shows a preference on how to operate within the relationship. In dyad 1 the importance of peer networks and social media are generally much greater than in any other dyad, while dyad 2 is characterised by the strong multivendor preference of the customer.

Personal relationships are important for exploitation in that they provide the KAM opportunities to educate the customer, influence the bid planning process by making the customer aware of different options for the offer, and to influence opinions and mind-sets. While ultimately decisions are made based on complex criteria of financial and operational considerations, exploitation is largely a relationship phenomenon. This is especially prevalent on a personal level in the first two and latter three dyads, whereas in dyads 3 and 4 the customer relationship preference ties to the company as a whole. In these dyads the customers strongly emphasise the knowledge assets and learning of Delta as an internationally recognised world-leader with a strong brand image. This may be due again to contextual factors because the personal relationships in these dyads are still fairly recent, and they are both in a culture where there is high power distance, which may influence how the KAM status is viewed. These two customer respondents are also working in the purchasing function rather than at the mill, and therefore their viewpoint may be less focused on technology and more centralised on the operational processes.

All in all, there are multiple differences between the dyads in terms of how the customer views the company's role in their value creation activities and consequently what knowledge they want and how. Yet contextual issues seem to have a bearing on this as the dyads sharing a subsidiary context exhibit similarities in other aspects of their customer relationship. Furthermore, the company context also influences knowledge transfer as the assimilation about the variation in customer needs seems to follow established network channels that may reduce the richness of the content that is being passed along.

5.3 Knowledge Acquisition in Customer – KAM Relationship

Based on the framework presented earlier, the phases of knowledge absorption taking place between the customer and their KAM is acquisition or acquiring information about the customer's needs, and exploitation, or providing a service that fulfils that need. However, reality is rarely so neatly organised that the two would happen sequentially without the influence of any other actors or elements. In this chapter we will look at different elements that influence, help or hinder knowledge acquisition between customers and KAMs. The same elements may take on different meanings in the other phases of the knowledge absorption process or be entwined across the process as a whole and will consequently be discussed in the following sections.

5.3.1 KAM Role

KAMs are the main actors delivering the after-sales service and they are targeted on sales volumes and key performance indicators such as sales visits, which act as indicators for the relationship. Together with field services KAMs identify sales opportunities and improvement areas at the customer site and communicate these with the customer and internally. In the interviews the KAMs frequently described themselves as operators in-between the customer and Delta, rather than sales people, as shown in the below excerpts from KAMs:

I think our customers realize now that the [KAM] role is a coordination role, kind of an account management role, so when the customer asks questions they don't expect us to have the answers right now. (KAM, NA)

So my place or my position is like the first aid for the [...] customers. (KAM, EMEA)

That is probably the main part of our job, to get the contact between the mill, our customers, and the specialists. (KAM, SA)

So I see myself as the main facilitator between the mill and Delta. (KAM, EMEA)

The KAM identity is tied to the relationships with the customers and the internal company network, not with the products or technical expertise:

A lot of the time they just tell us the problem and my mission is to find the right person in Finland to work on this. Or the person who knows the right person to come up with a solution or a plan. (KAM, SA)

Being the [KAM], we generally know the mill best. We help bring in our automation people, we help bring in product support managers, we help bring in our product managers when needed; we are the face of Delta and they kind of expect us to bring in the rest of the guys. (KAM, NA)

The KAM role has changed to become a more comprehensive coordinator role over the past few years as the company is striving to become more service oriented and focusing more on fulfilling customer needs rather than product development. When before the customer would contact multiple people for different areas of operations, the current trend is to drive queries through the KAM or at least keep the KAM informed of all developments at the customer site. The process is not yet complete and there are situations where the customer is still contacted without the KAM being aware of it. However, the internal message is clearly supportive of the KAM as the focal point and there is a general recognition that this is how the process should work.

There's five different activity structures going on in one customers facility. In the past there were five different Delta structures providing service to one customer. Today it feels more like those five are coming through the [KAM] and being coordinated with a customer. And it takes time to communicate that both with a customer and internally, but internally it seems to be working a little better than it is with the customer because, for instance, if the customer has been in contact with one division for service for 3 years and they have been contacting the same person for the past 3 years, they don't always copy the [KAM] or communicate directly with the [KAM] to I guess keep that communications loop closed. (KAM, NA)

From the customer point of view, the KAM role facilitates communications and makes access to Delta expertise easier and quicker. Because Delta has an extensive, international network of operators, finding the right people can be challenging. The KAM role takes this burden away from the customer and provides one avenue for both finding information and to express dissatisfaction if the information is not forthcoming.

We have been working together on many projects for many years so you build up those relationships and know who they are. And sometimes those people move on, some are not there anymore, Delta has gone through so many restructures. A lot of the good people that I knew have disappeared. So now I don't necessarily know who the contact is, and that's also why [the KAM] is there. (Customer, EMEA)

Thus, the KAM role is the lynchpin for the customer to provide information about needs and ensure that Delta has all the information they need to offer solutions that are fit for purpose: “*Yeah, that would be on us to share that with them, what*

our challenges are and what our goals are,” (Customer, NA). However, because the customers are not necessarily aware of the full scope of Delta’s activities and offer portfolio, and because they are busy people co-operating with a range of vendors, customers may not always volunteer information that could be useful to the company. The KAM is therefore beholden to ask the right questions and seek out information in the relationship, which requires a set of capabilities the company has not required from the KAM role in previous years.

KAMs are recruited from many sources, both internally and externally, and the capability bases vary. Two of the interviewees were working previously for the company they then became a KAM for, providing them rare insight on the customer needs and a sense of identification with the customer company:

And that's what separates Delta from all the other suppliers, it's because of [the KAM]. I've worked with other people from Delta and I cannot say that 100%. [The KAM], I've known him for about 10 years and he was a former [our] employee, but he's what really separates. (Customer, NA).

However, capabilities towards the customer are only part of the picture. As noted earlier, the KAMs occupy a generalist role, and they are required to have a wide knowledge base of all of Delta’s operational areas in order to ask questions, spot opportunities and recognise fields where either more information needs to be gained from the customer, or more expertise needs to be brought on site to provide information for the customer. Building the capability to master knowledge from such varied areas even to the degree where the KAM could tell when to bring in extra resource is challenging, especially if meeting sales targets is assured by staying within the comfort zone of previous product experience.

The SA KAMs see a clear need for a formalised training plan that would widen their competence base:

It would be much clearer if we had a training plan for the rest of the year and in the plan you would see what would come up and the sequence of things. Because if we only think of the daily work or even the customer, then we lose the future and what is your future in the company. (KAM, SA).

Other respondents were less vocal about training needs, and generally found the current training initiatives to be sufficient:

I think we need to understand all the equipment at least on the general level. Understand all of our products on a general level. We are very good about that, we do monthly product of the month training, which is very good. (...) That's excellent for us, and when you've been here as long as I have been you generally

know the whole machine pretty well. And I think that is enough for us to be a pretty good middle person. (KAM, NA).

This difference in attitudes can be explained by SA being a new operation with an acute need to raise knowledge levels to improve performance. NA and EMEA as more mature markets and with employees with longer tenure can rely on business as usual and therefore do not identify development needs at the same degree.

In conclusion, the KAM role has undergone changes as a result of servitisation and has led to the KAM taking more responsibility of the customer interface and knowledge acquisition. While this change has increased the importance and scope of the role both as a contact to the customer and as a focal knowledge source for the internal organisation, as of yet there is limited awareness of how the role change will influence the competence levels of the KAMs and what the servitisation process will ultimately come to mean to the people carrying out the customer interaction.

5.3.2 Innovation

When KAMs work together with customers, combining industry knowledge with the knowledge about the company's offer and the customer's individual needs, innovations occur. The paper industry in general is a traditional industry where changes tend to take place slowly with disruptive innovations rarely if ever.

On the industry level, there are big differences between the different grades and types of paper. Newsprint is diminishing due to declining circulation of newspapers and white paper is experiencing issues as people produce less paper documents and store documents electronically. On the other hand, brown paper and cardboard is experiencing a surge as internet purchasing increases and requires more packaging, while use of tissue paper rises as large populations in emerging markets have more disposable income. There are thus large discrepancies between the kinds of innovations that customers need based on where they are positioned as a business.

Furthermore, the customers are generally at least somewhat risk-averse and prefer proven technologies, which is not necessarily compatible with big innovative changes.

Generally in the paper industry you want to be a little bit more proven. You don't want to be at the bleeding edge of technology (laughs). Because when something fails it costs you a lot of money. When a machine takes down-time because of a failed project, it just looks bad for everybody. Because as a process

owner you kind of went to bat to make the sales pitch to get the capital money, and you went through all that process to get it installed, and then to have it fail and not get the results... That just looks bad for everybody. (Customer, NA)

Yet the industry is so competitive with the threat of shrinking markets in the horizon that companies are constantly looking to make changes and need innovations. The following story is an example of a successful innovative project Delta had with a customer:

*A good example from the present: This machine started up fully recycled, we don't use any virgin fibres, 100% recycled grades. But we knew that the market will be more and more tough; a lot of new machines are also converting to this grade. So we have to do something to be competitive on one hand and to improve profit from this machine on the other. So a few years ago we came to the point that we have to introduce the new grade, new for this machine. This means that we also need to use a little bit of virgin fibres. And you can do it in a standard way, or in an innovative way. And here was a good example of co-operation with Delta – I jump here to the end – what we did; we had the only machine in the world with this configuration. What we have done with Delta, this solution is working only here. So **it was tough to make this decision because there was no reference**. We couldn't talk to anybody, to call and check if the solution is working, if it does what we were expecting. But when we mentioned to Delta that we are going to introduce these virgin fibres, they proposed to us technology which can help us reduce the amount of fibres. That means reduce price because virgin fibres are expensive compared to recycled, so the aim is to use them as little as possible. With the regular technology you use them 40-44 grams, something like this. With this technology (...) we can use 30-32 grams. So if we start to calculate by days, it's a lot of money to save. But when we asked them: "Yes, it looks nice but where is it working?" Nowhere! So then they proposed pilot rounds (...) with a pilot machine, so we decide to go for it. We had two pilot runs and they were positive. So we reached what was expected. But it's still a pilot run and not the real production so **it was a real challenge for both teams to prepare this project for the board to be accepted**. It was a challenge to convince them that this is really working, just not in the real life at the time. We installed it this year (...) and about two weeks ago we had the first reel run and it was exactly what the pilot machine showed us. So we got the results. Of course there is a question of repeatability and we have to confirm that it looks really nice because this is a big innovation. There are also some side effects that we expect from this technology, so not only this reduction of fibres but most probably we can also save on other issues, some chemicals, so really, really nice. And this is what Delta proposed because **we were not aware that they had something like this** or that they were thinking about something like this. We just mentioned in some conversation that we would like to have virgin fibres on top and then they said: "Maybe we*

have something for you". That was the beginning of the story. (Customer, EMEA)

This success story illustrates the hesitancy of the customer to embark on a large-scale project without references from similar operations where the technology is working already. References are vital for building confidence for the customer, and for the customer to be able to prove the business case internally. Failure to provide results is reflected directly in lost profits for the customer company but backing an unproven technology and advocating a risk resulting in failure reflects also directly to the product champion. The decision-makers are therefore balancing a company risk and a personal risk when making operational investments.

This risk-averseness provides Delta a competitive edge based on their international reach and thus greater possibility to show proof of concept than smaller competitors:

Delta sells in almost every country paper machines so they have a LOT of expertise. They sold many, many paper machines in Asia the last 15 years so the development was done there and we are benefiting from it here now. So that is definitely positive in my point of view. (Customer, NA)

What is also shown is the crucial role of Delta operatives identifying the need and matching it with a suitable offer. The innovative role of the vendor is recognised both by customers and KAMs.

[Delta] is a big company, there is always something new going on, there is always R&D going on, there are always new products, and that is how we keep moving on. Because if we just sit there with the same products, well, everybody got the same products, because it is an industry that is shrinking. (KAM, EMEA)

Because if you want to be cost-effective, you also have to be innovative. If you want to be green, you need to have some innovations in between. And to have it, we need to have a very good co-operation with Delta or the other guys who are on the market. We cannot develop a lot of things on our own. (Customer, EMEA)

Thus, vendors would ideally develop new products and technologies, test them with indirect competitors and then introduce them to the customer, at which point the co-creation process would formally begin in terms of determining project scope and tailoring. The following customer story contrasts the earlier innovative story in that it emphasises the joint effort and relationships, which are crucial in the implementation phase:

[Project scope] is a joint effort. We have an idea of what we want to do but then Delta comes back and says: "Well, actually, you probably want to do it this

way". So **it's about talking and communications** between people. But ultimately when we have all these options it's up to us to decide if we want to forward this or not forward that. Once we understand what that scope is from our point of view, we have to cost that. The big projects can take years and years. I remember I was working on a project for five years and it never happened. I mean, that project happened. It wasn't the original one. It morphed into something else. When you're trying to develop a project, you are not just working with Delta, you are working with the other players as well. **You are always bouncing ideas.** I'm sure that Delta knows what their competition is up to. From my point of view, I am dealing with points of contact with this company or that company. And you are looking for the best ideas from each company thinking: "Well, I quite like this or I quite like that". So **you are pushing different companies to do different things** as well. So we are saying that: "We quite like this idea from here or this other idea from there, so is there something that you could do that would be quite similar?" Best of both worlds, part of the cost. Delta, [main competitor], they are not cheap. They are professional market leaders in the paper industry, so you expect a professional project to come out of it. Not all companies are that way; they look at cheap and cheerful. From my perspective cheap and cheerful, I hate that. I want something that works. **I would rather pay a little bit of extra money to have that confidence that it will go in and work.** You can't shut these machines down for very many hours or days without causing a lot of problems. So you got to have that confidence that it will work. (...) You are looking at these things all the time. Where are the bottlenecks with these machines today? They are not the same that they were last year or the year before. Things change so you do look at different projects several times in a lifetime. So the knowledge and the background it is there, it is just knowing that I looked at that a couple of years ago, so it's getting all the information and looking at it again. So there is always quite a lot of background information there. (...) So for me it is about working with people, **working with people you understand and who you trust.** I do have many friends with Delta who I trust. Some people don't do it that way. Some people are very blinkered and just say: "I want this and I want that, give me quotes", and pick the best quote. We don't work that way. I need to have this personal contact, a personal relationship to work with these companies. Of course it is still professional, everything is done correctly, but the working relationship in creating a project and when you are actually doing the project, it is very, very important.

A consistent feature of the interviews across units is that innovations are talked of in terms of product innovations, or as one HQ respondent puts it: "We are very good at making hard packages, but very bad at making soft packages". This refers to the company's reputation for product excellence but the lack of focus in the past in the area of service development.

Comparing the stories against each other there are both similarities and differences. In both the customer assigns a role for the vendor in the innovation process. In the former the emphasis is on the proactive role of Delta coming up with the solution, reassuring and convincing the customer, and then delivering a performance that lives up to the expectations. In the latter the customer takes a more dominant role in balancing options and building a solution that works, and the role of the vendor is in implementing the reality of what the customer expects. Both stories are context-bound and in different circumstances the respondents might assign some other roles both for themselves and for the vendor, exemplifying the dynamism of the innovation process.

What rises from these stories is an understanding of the customer's perspective on innovation and also the value of innovation. Risk averseness combined with a shrinking industry, and therefore shrinking knowledge resources for customer companies, means that customers want vendors to be very proactive in advising and consulting on new innovative ideas. Moving forward with a vendor, however, requires trust and confidence. Each moment that the equipment is not operational is loss of income for the customer so the reliability of machine working is of primary importance, off-setting in many cases the upfront costs. Innovations are thus based on the vendor's ability to develop and match offers to the customer and to create the kind of relationships that these can be fostered to implementation.

5.3.3 Local Knowledge Integration

While the KAM role is integral in uncovering customer needs, the KAM is by no means the only access point to customer information. Depending on the type of information, neither is it the best access point. The customer site is visited frequently by specialists from different areas, maintenance people with a specific mandate, and project people. All the knowledge gathered by the different actors is information acquired by Delta, but without a concerted effort to gather and utilise it, the information remains scattered and yields little benefit for either the customer or the company.

The KAMs interviewed mostly emphasise local knowledge sources in terms of support they can get when needed. Conversely, the local support staff and HQ are much more likely to view these alternative customer contacts as means to gather in depth knowledge and suggest solutions prior to issues becoming problems.

I think that's really the key thing, you need to get that team working. And then the creativity really starts getting in that team when they start getting input from each other. Everyone contributes because everyone who is out at the customer site has an awareness of the business idea. (Support, SA)

I think 100% we can be better at that, not just the [KAMs] but the engineers. We are going to the sites, we see opportunities. And not just a [local] employee seeing an opportunity for [local operation], but we may see an opportunity for automation or a fluid handling system coming from Sweden. We should be logging that and I don't think it's communicated well enough from the management, nor do I think we are trained well enough. (Support, EMEA)

(...) it's still that [KAM] is the king. And I've said that yes, they're the king but they don't have time to go to the level of nuts and bolts. The [KAM] waits that the customer tells them there is a problem. The only job our guys have is to find the problem proactively so that they can sell a solution to it. (HQ)

This does not, however, indicate that KAMs would not utilise information gathered by other actors or recognise the value of the access engineers and maintenance have. What it does indicate is that local information sharing occurs mostly informally through word of mouth or because the KAM engages in knowledge seeking activity. Thus, the information acquired through these access points is something extra for the KAM to use, rather than a formal or required expectation of their work.

We have call reports so everybody has to write call reports per visit, it's mandatory for everyone when you go to a customer. So when you go to [the CRM system], you see all the information like, who, when, who did they talk to. And most guys they talk also, they say: "Hey, I was at the Mill yesterday, they said they need this, can you call them?" And the general philosophy around the mill, I think the guys discuss about it. They discuss well what they do and what they find out. And then you get call reports. So there is nothing official, there is no rule that you have to call this guy to talk about it but I think most guys do it. (KAM, NA)

That was a time when there was a problem (...) and it was potentially two million pounds, so we sat around a table and I said: "What are we going to do to secure that two million pounds for us, what are we going to do differently?" And at the time there was a service guy, and I could not remember the last time that I had seen him at that mill. So I said: "Service, service, service; go there and make yourself useful for a customer, get information that no one else has." (KAM, EMEA)

The general sentiment is that while information sharing even among the local team could be better, it is working sufficiently well. Access to resources can, however, be an issue especially for actors further away from the European hub and this raises some concern in terms of knowledge transfer:

I truly believe that with the high level of service that Delta provides we need to continually add to our resource pool. The number of resources that we have always feels a little low. I don't know the utilisation numbers as well as I should,

but I think our technicians and our technical experts are over utilised. And I think we need to start building some knowledge transfer activities into our everyday activities because that is one thing I don't see. (KAM, NA)

Personal networks, friendships and proximity to key specialists are used to leverage information and support. New members are assimilated to the network through the support of older actors and their networks. The risk, however, is that geographically isolated actors find themselves in a situation where they cannot exert influence to push their agendas forward. While formal systems and structures are in place to ensure actions are processed swiftly, a personal relationship may still get things done quicker.

So I feel a little bit forgotten here. Take [a colleague] whose office is in [local hub], so if he needs something (...), he walks downstairs and says I need this and I need it tomorrow. And because it is face-to-face they will say: "Okay, I will do that for you". Me being (...) out of the way, I feel like some of my work is pushed back because I am not in their face. (KAM, EMEA)

Team meetings are seen as a good venue to share knowledge internally, but work load and customer engagements make it difficult to organise them.

I bring it up all the time, we meet once a month to talk about what project are outstanding, And I wish we would meet sometimes to talk about the successes we've had in other places. And the negatives we've had. I actually sold equipment that's had problems and found out that this problem had happened two months before and nobody even let us know that, you know. For some reason we don't get that information out for all of us. (KAM, NA)

We try to have one regular meeting per week just to know the activities that we are working on and with our service specialist and of course the main project we are working on. I say we try to have that but of course the people are around working on different mills (laughs). It's not easy to be one day all the team at the office. (KAM, SA)

The SA interviews identify mostly as a team, which may be due to the national culture, the lack of resources which forces all actors to pull together more and/or the sense of outsidership for being a new, growing business area. Any and all of these factors may contribute to the SA operations feeling a strong sense of cooperation and unity locally. However, NA interviewees also show a strong local identification and reliance on the local support network. The major difference is that SA respondents do not have expertise available locally and therefore while the teams are closely knit, they source support from abroad. NA teams are geographically spread and have less cohesion in the daily work, but expertise and support is more available within the region when needed.

Five or six years ago we were maybe five people, now we have 20. So we are responding to the increasing demand in the business. But the customer just tells us what is their need and we have to know how to handle it, we have to know if we need more resources right here or if we need to contact more people outside. And then we need to figure out what we're doing here. So in general, it works very well because I think we have a very good team here, very proactive, dynamic, responsible, very professional. (KAM, SA)

Customer may also share information with other Delta actors due to established relationships, which may complicate the lines of communication internally.

Yes, that can sometimes get confusing. It's not something I would say that I like, but for example one customer knows [John] and [Mike] very well because they have been in the company for 20 years. I have been for one. (...) But the important thing is that if the customer has requirement which is important, I need to communicate that to [John] and [Mike]. On the opposite, if the customer has something they need from me, [John] and [Mike] share it with me. It's about sharing information. That works well I think. (KAM, SA)

While this may cause confusion, such relationship can also be very useful in accessing multiple levels of the organisation. KAMs have conversation habitually at the level of Mill Managers but rarely higher than that. A separate corporate account management structure is in place for communications at the corporate level but even locally a sales manager may have more authority to reach the higher echelons of the customer organisation than a KAM.

Furthermore, in terms of support, KAMs (and customers) can be selective of where they reach out. Positive or negative experiences dealing with internal support persons lead to some actors being crowded with requests, which may cause delays in the information sharing process.

(...) but then you find out that the person you wanted to do that quote with has just got on two weeks of holiday. And the person who is left in the office, well they can put a quote together but the scope will not be as efficient as with the person you wanted to do the quote with. (KAM, EMEA)

If there are two individuals who hold the same knowledge, yet one is more easier to talk to, more practical with the response, or timely with response, I'm going to go with that. (KAM, NA)

On the whole, local information sharing is recognised as an important factor for customer knowledge acquisition but there is little formal structure around it. The customer relationship is enhanced through knowledge sourced from various parts of the customer organisation but without a specific aim, such as part diagnostics, this easily becomes reactionary whereby maintenance personnel or engineers

merely convey stated requests to the KAM. An organisational push is required to elevate local information sharing to a point where it becomes a value-added factor that the KAMs can rely on to create proactive solutions.

5.3.4 Barriers for Knowledge Acquisition

Relationships are unique and often come down to personal chemistries. On rare occasions personalities clash to the degree that professional co-operation is jeopardised. *“There are cases where we have changed that you are now responsible for this mill and you for that mill, and then the guy has come back and said: “Hey, the chemistry isn’t working with the maintenance engineer or production manager, so I can’t work with them”, and that’s also a sign of a good salesperson, that they recognise that,”* (HQ). However, it is much more common for relationships to meet barriers borne out of practices or obstacles due to the day-to-day realities of working in a result-oriented field with limited resources and support.

Reporting is an activity that has increased in the information society, causing much headache for people responsible for delivering it. Reporting without tangible outcomes can cause even more frustration:

It just seems like instead of getting in front of the customer where we can sit down and gain the trust and talk, and find out what the issues are so we can find out what kind of technology solutions we should be in front of them with, we are spending time in the background doing the paperwork and what our managers tell us is managing the account. Not, you know, interacting with a customer. So part of the managing the account includes all these other things than interacting with the customer whereas three years ago, interacting with a customer, it was our focal point. And if other things came up we would handle them if we had time. It seems like now it’s flipped. We are being directed to handle all of those other things and customer interaction, that’s what’s going to fall short. That’s where the time is being taken from, customer interaction. So that’s tough. That’s tough. That’s what I spend my time doing. (KAM, NA)

Yeah, it’s become very tough paperwork wise. (...) It’s just that we’ve lost a lot of our sales time. Doing paperwork, and most of the times it’s measuring. Measuring us. It’s done so we can be measured, it seems... I don’t know, I don’t think it’s the right way to go but... but I’m glad to do it, I just do it. I do what they ask (laughs). (KAM, NA)

I think paperwork could always be improved. It feels like there is more and more of it and you feel like you could spend this time, I won’t say more important things because it is there because it is important, but it’s like I could have used more hours with my customer. (KAM, SA)

Reporting is unlikely to be anyone's favourite pastime but the KAMs indicate that there has been an upward trend over the past few years. This can be related to the company's servitisation initiatives in that the company is trying to drive its objective to be closer to the customer and operate in a more customer-oriented manner, and therefore needs to know more about the customers and sales activities with them. The servitisation process also includes a more common global approach and reporting can be used to ensure that service levels and customer encounters are met to comparable degrees. However, it is possible that the increase has also occurred as a result of the world becoming constantly more connected and information being ever the more likely to be stored in data repositories and systems. Whatever the cause, the outcome is that KAMs feel they are spending more time away from the customer, which influences their ability to build the customer relationship and to get vital information from them.

A problem that the servitisation initiative is trying to fix is people's propensity to operate within the organisationally defined boundaries and the comfort zones therein.

We have these five business units - we have rolls and spares and mill improvements and energy and fabrics - and then we've said that "Damn, these have become silos; they have all become their own organisations. They don't have discussions with each other and they visit the customer one after the other". So we've decided that it would be good if they could generate sales together and have started to track it." (HQ)

The HQ respondents view silos uniformly as a barrier for knowledge acquisition and ineffective for operations. The strict lines between product categorisations are a legacy from the product focus and allows for in-depth expertise to be developed within the unit. The servitisation philosophy, however, dictates that the customer is less interested in the individual product and can be better served with a solution that combines knowledge from the different areas of expertise.

This approach influences both the KAM and the organisation supporting them, and requires a fundamentally different approach to the daily work, which is not necessarily easy.

We are product-oriented, we have been divided per product. Somehow we've just divided in the way that you are responsible for this and you stare at the figures for this product category and you for that. Of course everyone understands that the customer doesn't do that, but that's the way we are organised. Just yesterday I got a comment that: "Why should I do something if someone else gets the goods?" To put it in a pointed way. Even if it's not anything away from me, but if I don't get anything from it. (HQ)

Besides the desire to reach out and start devising more holistic solutions, KAMs need the personal competence to know a little about everything and ask the right questions.

It's only starting now that we have an actual desire to recruit people in the customer frontline who have the ability – well, of course that develops in each of us – but as a starting point, if you make a machine builder have a conversation with a paper maker, it's not self-evident that one understand what the other is saying and especially what they don't say. And they might not know the right questions to ask. (HQ)

Recruitment policies, career progression policies, training initiatives are all complicit in building a work force capable of relating to the customer's daily operational challenges and engaging in value co-creation that takes the customer's whole environment into account.

Therefore, the main barriers for knowledge acquisition in the context of the servitisation initiative are managerial requirements that hinder customer relationship building rather than enhance it, organisational structures that encourage narrow knowledge seeking behaviours, and lack of necessary KAM capabilities, or policies and practices that do not foster necessary KAM capabilities. As the company is in the transition period, some areas may experience rapid changes, but changing people's approach on how to do their work and how to manage their relationships is a time-consuming process.

5.4 Knowledge Assimilation in Subsidiary – HQ Relationship

Knowledge assimilation refers to the process of transferring knowledge from the local unit to the wider company network. While this may take place laterally between subsidiaries or sales units, this research looks at assimilation in the more hierarchical relationship between the local unit and HQ, where the local operatives are the senders and HQ receivers. Assimilation may have various motives for the sender and is sometimes voluntary, at other times normative. There may be an assumption of reciprocity, a stated need, or information may come labelled with “for your information”. While knowledge acquisition is primarily a function of knowledge transfer through personal relationships, assimilation takes place both informally and through formal reporting channels and structures.

5.4.1 Internal Networks

Hey Joe, can you help me with this? We have worked in the past with something similar; can you help me with this? (KAM, NA)

Wise man says that within one organisation there are two: The formal one and the one that works. (HQ)

A typical motive for engaging in knowledge assimilation for a local actor is the need for support which is not available locally. KAMs reach out to the HQ to explain to their contacts what the customer needs are and what they require to respond to them. Many of these assimilation processes are formalised and if the needs are simple and tangible, such as spare parts, the process can take place systemically. However, when the needs are more complicated, systems are no longer sufficient and it is necessary to reach out to people.

One problem in reaching out in a company as large and sprawling as Delta is finding the right person. In general, the KAMs do not view it as an issue as they have networks of their own and if they do not already know the person themselves, they can either ask their manager, someone more experienced in the local organisation, or ask by email a referral from their HQ contact.

So that is really important, that you know somebody who knows somebody. You can meet people during different actions or during different services, conferences, or re-builds. You have to keep this knowledge, you have to remember people. Then you can use it. Of course you can ask somebody else, somebody who has different experiences or has been in the company longer than you. So it is not a problem, you will get the support every time. So it is not so difficult. It's just quicker, because then you are talking directly to the person who can solve the problem. (KAM, EMEA)

There are some people who come here on projects so we talked to them. I'm trying to explain the situation and they say: "Okay, this is the right person. Give me the email and I will try to be in contact with them". Another very good option is to go to the other unit for a few weeks and get to know the people. Of course always trying to find the right people. (...) But it would be good to have like a map where you could see who is where because when you have all in your head, sometimes nobody knows who is the right person. And in the process that takes lots of time, you lose time. So maybe you should paint a map of all the networks in the organisation. (KAM, SA)

But it is timescales, really. It's about being able to deliver a piece of equipment on time. They've got big lead times, as much as everybody else, but that would help. And (...) having a clear structure. So that people would know, even for [the KAM's] sake, who to talk to. It is difficult to find the right people to talk to. They are always restructuring, they are always changing people, and that is not a

*problem provided that you know who you can contact and talk to you.
(Customer, EMEA)*

Knowing the right people is something new employees learn over time and it signifies an identity within the company. The informal structures operate so smoothly that in many places there are no formal channels that could replace them. It is generally accepted that new hires find their way to the internal network through the help and guidance of managers or senior employees and people seeking for help are referred forward towards the right people.

Those are all learned activities. I wouldn't expect a guy walking off the street becoming a Delta member to know that that's the chain of things that happen. I still don't know probably most of the things that I should with the internal workings of Delta but I am comfortable asking people who have been part of a team for longer than I have, or not even people who have been longer but who have knowledge about how that process works. (KAM, NA)

Finding help is generally seen as easier in Europe, where a lot of the technical and expert hubs are and distances are short enough that people can network face-to-face easier. NA and SA are geographically more removed and the attitude towards networking internally has taken different properties in each. The NA KAMs operate more locally and if contact needs to be made with HQ or other countries in general, it is done through the local product experts rather than directly by KAMs.

In my team I am the youngest guy. Most of the guys are in their fifties or sixties. It could be an issue in a few years but most of the guys have been here for a long time. So they know pretty much everyone in the company, maybe not in Europe but in North America. They know who to go to or if they don't then they talk to someone and they tell them to talk to the other person. There is no system in place, and even if there was, there's no point for us to look into internet or Delta intranet for experts, we have the people in North America we can talk to. They know the experts in Europe or the global experts if needed. (KAM, NA)

In SA, the aim is to network more directly, get experts to come over and get their attention and commitment for the market. This allows the local actors to teach the experts about the local conditions so that they become positively inclined to give support and conversely, the local staff receives learning from the experts.

*[Finding the right people] is very important. What we have done now, and are trying to do, is to improve the situation because it is a challenge. **For the majority of our people, Delta is just [an intranet] page with some names.** (...) We need to get our people in to get to know the people who are moving around the company. So that they get to know them and then they know who to call at first at least; someone who can guide them to the right person in*

*the organisation. That's something that takes time and we have tried to emphasise that now. Also when we dedicate jobs we try to make sure that everyone cooperates with people from home. We have now identified a few key technology areas of all products where we can take the benefit of having a senior technology expert here for a period like six months or three months or for a year. Being here and always having as a "backpack" one of our engineers, and in the end when they go home he will be like a father to that person in the future and can help him. And if they've been out here for six months together, going out in the mills, talking, doing funny things outside of work, in the end **it probably becomes a lifetime relationship**. And those things are also important. Because when you are sitting so far from Europe as we are it is not common and it is costly to send someone for one week to see how things are in [Finland] and then they come back. You can do it if you are in Germany or England, but from here it is not really manageable. That means that **it brings more value to the business if we have expertise here**, coming here from the outside, and it also improves our image, our strength, that we have really capable people here on site. We can see it already, that we can support them immediately brings a lot of value. (Support, SA)*

There are structural differences between NA and SA that account for the differences, as NA has an established support structure locally, while SA is building up expertise. However, the discrepancies are presumably also cultural. As the excerpt above shows, in SA having foreign expertise is considered positive for the image, while NA is more self-sufficient and having an international brand does not seem to bring any additional value the way the international reach of the company does. It is important for both NA and SA actors to receive support quickly and to the degree the customer needs it, but the NA respondents are more inclined to go through local networks and systems whereby they exert their influence to get support through their systemic power. As NA is an important, mature market, they can expect to get support based on a request. SA has less systemic power as they are a growing market, so they seek personal relationships and informal channels that they can leverage to get support quickly.

5.4.2 Culture, Language and Distance

Cultural and language differences and distance between Finland and the local units can also influence assimilation. English is the corporate *lingua franca* for Delta, and neither spontaneously nor prompted did any of the interviewees state feeling excluded or disadvantaged because majority of the HQ operatives are Finnish speakers. The aptitude in English was more of an issue with some English speaking respondents mentioning that there are sometimes delays due to communications clarity, while non-English speaking local staff experience

difficulties in making relationships due to their lack of English skills. The critical factor is that translations and making sure that all documents are understood correctly takes some additional time, but this is more a fact of customers wanting information in their local language than internally.

Larger influence on communications was the cultural attitude.

Sometimes it is difficult to communicate because Chilean culture and Finnish culture are very different. Finnish people are too serious and very practical and they don't promise anything that they have doubts about. So sometimes the way you communicate, it sounds quite tough for Chilean people. For example, if some customer is asking for something that they feel it is very difficult to give, they will say it's not possible, right away. And that will sound quite impolite here. But in Finland they feel that that is the proper answer because they can't give any hopes that they cannot reach, because that would be irresponsible. (KAM, SA)

If we have the results (...), then we can confirm then and we can say to the customer: "We would like to show you real facts, not promises". Because I can promise you the stars from the sky, and then we will start up and nothing happens, so I will take the penalty and you will stay with us, but the stars will still be at the sky. We are not promising something that is not possible. We are realistic. We have real figures and realistic cases. I mean, okay, maybe the balance could always be higher, with the raw materials there are always issues, but I believe the customer also knows now that the Finnish behaviour is different, they are really straight. They are not promising something different. (KAM, EMEA)

One that comes up often is that Delta is the most arrogant company in the world. The arrogance is in a class of its own out there in the world. A) We don't even look at small companies and B) if they have credit problems, we'll look even less and C) if a competitor is dominant there then, since we don't have resources to handle it anyway, we won't even offer. (HQ)

While the HQ cultural norm of stating very clearly if something is not possible – sometimes veering to perceived arrogance or unwillingness to tackle difficult or risky situations as in the above – is a benefit in the occasions when it is used to engender trust, it can also come across curt and impolite to other cultures. The KAM acts also as a cultural translator towards the customer, making the Finnish statements more palatable to local conditions. Conversely, the HQ staff are dealing with a variety of national cultures and trying to assimilate knowledge from a variety of sources, with mixed results.

The effects of distance are threefold: Time difference complicates communications and physical distance prolongs delivery times and the availability of experts. The

last of these will be discussed more under knowledge transformation but in terms of knowledge assimilation, time difference complicates issues because unless the matter is urgent, in many places there is only a limited time period both HQ and local staff are at work concurrently. Queries are therefore made over email (which is often the default even when phone is an option, as emails leave an audit trail) but responses arrive only in the following morning.

*There's always some challenges with the time differences so that's something I had to get used to a little and to learn. So at Friday morning at 10 a.m. if we sent a request overseas, that likely will not be responded to until the next Monday or Sunday night. So **that took a little bit to get used to and to communicate that with the customer**, you know, the reasons why, and they are receptive, typically. There is always someone who will respond or who will pick up their cell phone no matter what time it is; if it is truly urgent we will find a way to get the right answer and the right contact. (KAM, NA)*

Yes but sometimes we talk on the phone as well. Because emails... there's a limit to emails. We'll try to talk and depending on the work and the time of the day, I don't like to call people in Finland in the middle of the night or evening for them unless it's super important. And if it is evening here I just send them an email so they can look at it tonight or in the morning and the next morning we can talk. (KAM, NA)

The time difference can stretch out even simple queries over several days as information is exchanged back and forth. However, the KAMs do not expect the time difference to cause undue problems in the customer relationship as long as the delay is explained and expectations managed. Greater problems might be expected during the traditional Finnish holiday season, which may stretch from late June to late August. This was, however, met with wry humour.

It's just a running joke that during the months of June, July and August you don't expect an answer. Just hope nothing goes wrong during June to August. Or September. (KAM, NA)

(Question: So getting support is still about finding the right people?) Yeah, in a timely fashion. And preferably not in the summer (laughs). That was one of the good things about [the project] happening in June, because everyone was very motivated to get it done on time. (Customer, EMEA)

All in all, cultural and language differences do not cause insurmountable issues for knowledge assimilation but they require adjustment from both sides. Because Delta is largely managed by home country nationals, the company has a Finnish cultural bias. However, Finland is generally recognised as one of the leading countries in the paper machine industry, possibly giving it even an air of cultural legitimacy.

5.4.3 Communication Systems

A lot of information is conveyed through reporting systems and tools, and the efficiency and usability of these is critical for the senders wanting to use them and receivers to find what they need from them. From the customer end the primary communication tool is the CRM tool, which acts as a general knowledge repository with call reports and logs to track current and past customer activity and forecasting opportunities. As a part of the servitisation process, all the current systems are under review with the option of integrating them into a single platform. From this perspective the current situation offers an interesting snapshot into the servitisation process, as different actors have wildly different views on the usefulness of legacy systems. Therefore, building new ones that employ a different philosophy is challenging.

The CRM tool divides opinions on organisational lines. The local staff have mainly at least somewhat positive opinions about the usability while HQ views it largely not fit for purpose or fit for some purposes but not all. For sales people the CRM tool is helpful because it records all the activities at the customer site. As multiple people visit the site, they log their activities and the KAM can keep on top of what is happening, especially if it is the case of a lower tier customer where visits are infrequent, or if there are a lot of outstanding activities. The consequences of when this does not happen can reflect in the customer view:

*I had a case where I went to a mill and I looked at [the CRM tool] and it showed that nobody had been there. And when I went to that mill, I found out that we actually supply site service people to do maintenance there. There was nothing anywhere in visit reports that we had even been there, so **that made me look a bit stupid**. I go in there as a representative of Delta and they say: "Oh, your boys have been here last week". Information is paramount. (...) There's nothing worse than what I said going to a customer on finding out that site services have been there a week earlier and **I knew nothing about it**. It doesn't just make me look unprofessional, it makes Delta look unprofessional. If I was a customer it would make me think: "Oh, you don't even know what is going on in your own company". (KAM, EMEA)*

I think [the CRM tool] is a good system, by the way, to track our progress. I actually... I guess a lot of people don't like it; I really like it. Before I visit the customer I look in [the CRM tool] to see the projects that are already outstanding. Most of them are in my head but I still like to look through to see what we have going so I can follow up. And that's made the follow-up a lot better, for me anyhow. (KAM, NA)

The tool also improves visibility in actions beyond the KAM. Because so many of the actions that take place in the customer relationship are performed by experts,

specialists, maintenance or other support personnel, the lines of responsibilities in open activities can be long. Furthermore, because internal networks are used to augment the formal processes, the transparency of the process can suffer.

*If we use that system then **we can check who gets what support and where and in what order**. So if we just use the system that we have in place, we have everything in black and white, they can track what inquiries we have open, what quotes need to be done. So that's new and I think it's going to help me out because instead of me going on a weekly basis: "Where's my quote?", and somebody just saying: "Oh, I'll do that next week", there is now a work order, a process. (KAM, EMEA)*

From a HQ perspective, the CRM tool gives information about tangible, measurable issues such as who is dealing with a customer and can provide more insight, what is the installed base and sales status information. However, the system is less flexible in giving a complete understanding of the customer situation and internal sources are used in parallel.

A lot of people visit the customer and for everyone it's not that kind of tool. So probably personal conversations are a bigger forum than [the CRM tool]. (HQ)

*As a self-sufficient person it has never occurred to me to check [the CRM tool]. I call someone and ask them to tell me about it. **The thing to learn is who to call**. (HQ)*

If there's a new customer I don't know, I can find out from [the CRM tool] who in Delta knows them. And then I can call the local KAM saying: "I hear you're after this customer, there's a job like this and that". So in that sense it does what it needs to do: lets me know who knows. (HQ)

The purpose of a CRM system is not to replace communications and relationships between people. However, the current system is built for the needs of a product organisation and primarily for the capital division dealing with large machine deliveries and implementations. Services by their nature are recurring, flexible, tailored and small-scale, so the systemic logic is not a perfect fit. As the servitisation process proceeds, systems are moulded to better suit the mind set of sharing information rather than just tracking it in order to build long-term relationships in which varied actors can perform value-added activities.

5.4.4 Barriers for Knowledge Assimilation

In a sender – receiver relationship the barriers for assimilation can be on either end or in the relationship between the two. The issues of the relationship have already been discussed in terms of informal communications, formal reporting

systems and cultural and language differences. The regional senders identify a barrier in assimilation mainly in terms of the time it takes to get an acknowledgement that the message has been received, leading to frustration and uncertainty on whether the request or information is being worked on at all. HQ responsiveness rises up as worry in many of the interviews, which is understandable as the regional organisations are largely dependent on HQ for knowledge resources.

*When you don't get a response. **When you put a question in an email and you don't get a response in weeks.** It is almost unbelievable; I don't understand how in such an organisation we can even have this. Sometimes you can forget, that's okay, but then you have a second email or a second call and then you still don't get a response. That frustrates me a lot. (KAM, SA)*

*So I emailed them, (...) and I sent my emails with a red ribbon because this is very important, because there is a problem with the customer and... Nothing. Following day, I sent another email and... Nothing. The next day I sent an email to the (...) manager and said: "Please could you approach this person because you are more senior level and ask them to come back to me?" He emailed them: Nothing. He emailed their boss: Nothing. (...) it took a week. And each day I was getting a grilling from the customer. (...) I understand that people have workloads, but if he had just replied and said: "I will reply to you at the end of the week", then I know that it is coming and I can tell the customer: "Look, I am handling it and I will get back to you". **When I know nothing, I know nothing.** (KAM, EMEA)*

*(...) they say they want to purchase something and they need it in four months, and what they are asking seems very reasonable. But then I go internally and I find out there's no way we can make it. (...) And then I push and push and push and eventually, in a lot of cases, I can meet that delivery. And **we waste a lot of time pushing when we should ask the first time and they should be looking as hard as they can to see if it is possible.** Instead of just saying: "We can't do it", very quickly, they should probably be digging in harder and find out maybe there is a way. So we have to be more: "I can get it done", look for ways to get it done instead of looking for ways not to get it done. (...) We don't even know in a lot of cases what they are doing to get it. Talking to our parts group they have no idea, they are just trying to find the part. Sometimes it takes weeks just to get an answer, you know. I think they try their best but sometimes it takes weeks. (...) (KAM, NA)*

The common thread in these stories is the frustration of not knowing what the internal system is doing, if anything, and a sense that the receiver does not recognise the importance of the issue. The purpose of assimilation is often not just to convey information, or even to get to the process of actionable information, but to elicit a sense of urgency in matters of importance. Birkinshaw and Ridderstråle

(1999) called the HQ's rejection of subsidiary initiatives a corporate immune system but these excerpts show there are cases where routine requests occasionally are met only with stony silence. Formal rejection at least constitutes an answer but getting lost in the system without response causes a state of uncertainty that the customer is likely to pick up. Different methods can, however, be used to overcome such organisational nonchalance.

*The best way is to invite some [internal] people to a workshop. To take some customers with you because then they can feel the pressure from the customer. And more importantly, then they really understand that this is very important for the customer. And their actions, what they do, really have an impact to the customer. So I am not saying that something has been done right or wrong, but if there are some sort of delays in production or scheduling delays, they have real impact to the customer. So the best thing is just to invite them and say: "Here, let me show you how it is working". And then you show that it is not just for my game, I am not pushing them just because I would like to make a huge turnover. No, you have to see what is really going on there. They might not even be participating that much but always after that meeting they are saying: "We really have to work hard on this!" So this is really important, because if you are let's say in production, then you have the figures that you have to achieve and the rest doesn't matter. But then **if you see the other side and what is the impact of your decisions towards the customer**, then it is really different. (KAM, EMEA)*

*When I write an email, I know very well that people don't like to read emails. I try not to be very long and I use my psychology to explain how things are, I try to put a little context around it. It's not just the words; it's trying to give the idea. We need this because of this, it's not just for no reason, we need this because the customer needs it and if the customer doesn't get it they will be very upset or we might lose a potential deal of millions of euros. But **the guys in Finland or Sweden, they don't have the feel of what is happening here**. So that is what I am trying to explain in the message. It's not just an email, it's not just a call; it's a message, something with content. That is my way of how to do things. It is important to get the right people to contact. You can't be in contact with all of them because that is a lot of time and resources, but at least find the right people and create strong relationships. That is the key for the business. (KAM, SA)*

While these two excerpts show very different approaches, one an effort to bring people together, other an effective way of writing emails, both rely on reaching the personal commitment and engagement of the people behind the processes. Both are trying to advance their case by appealing to the customer and the context of the customer situation and thus purposefully, and in the case of the first excerpt explicitly, distancing the situation from their personal gain. Considering that the

KAMs are paid based on sales targets, this creates an interesting situation where they are expected to behave self-servingly but must justify the need for support almost altruistically. As people tend to be more willing to help someone with a need rather than someone who is just looking to line their pockets, even when the two are in practice the same thing, this bit of psychology implies that organisational structures are built as much on relationships as they are processual.

Assimilation is a two-way street and from the HQ perspective information is as vital as support is for the regions. Many of the HQ respondents identify lack of knowledge about customer needs as a major development area in going forwards in servitisation. Without using the exact words, the HQ respondents divide issues in acquisition and assimilation phases, some identifying problems in current KAM capabilities, recruitment and approach, others in obtaining the information from the regions. Here are two excerpts illustrating the difference.

*I think one thing that would help is being involved as much as possible in the customer surface. In a big organisation there is always the problem that **an organisation of a certain size is perfectly capable of keeping busy even without the customer**, everyone has enough to do and has fun. But being in the customer surface and listening to the customer and acting there, that would bring more of those Eureka moments of what the customer wants and what are they ready to pay for and where we need to improve. If we have that side in order and the knowledge comes to the organisation, even to the steps further away from the customer, I think that's something that keeps us afloat in the long run. This current structure already has quite a lot of steps, so a large portion of the people are already quite far removed from customers. **I wonder if some understanding already disappears about what are the things that we do that really provide value to customers** and they are willing to pay for, and what are something else, something maybe we think are important but in practice just add costs, not necessarily value. (HQ)*

*[Servitisation] is our understanding of how we can best uncover the real customer need and alternatively how we can best respond to it. So it's not easy. The customer will often ask for something but it's not what they need. You need to get more behind the issues. And our sales network which is closest in the customer frontline, well, we're machine builders. And when a machine builder meets a paper maker, they don't necessarily talk the same language. Little by little – maybe because of this [servitisation process] or despite of it or otherwise in parallel – this kind of development has happened and our sales network has more paper makers. **This should be a conscious effort that we put in the customer frontline the people who speak the same language** – the same technical language – and people who understand the world where the customer plays and fights every day. They could also translate better to our technician language what the customer really needs. (HQ)*

Thus the problem may be in getting the knowledge from the customer to the KAM or from sales to the wider organisation, or both. Knowledge stickiness (Szulanski, 2000) can explain why knowledge that is already within the organisation is not transferred to other parties, as people do not necessarily volunteer information if the effort of providing it is not seen to bring any benefits.

*I'd need more competitor data. Sometimes I've gotten it really well but it's always a bit more difficult to get. (...) **It doesn't always travel all the way here, it's kind of lost in transit.** And when people say we should sell at a market price, what is the market price? We should know pretty precisely what the market price is then. Sometimes it's been possible to get a competitive pricing table at hand but that's rare. In our organisation some people might not think that this could be useful for this person or that, I should send this. Or maybe they think they've received the information in a way they don't really want to start explaining so they keep it to themselves. In principle we do not look into competitive offers but sometimes you may chance find something out. (HQ)*

*It's always good to get customer needs from customers or sales and then we can use them as a basis to think whether we might have something to offer that responds to this need and brings us more business. **It's a bit challenging to get that need along the chain all the way to product development.** What is easiest to get is what competitors have. At least sales people are eager to tell that: "Customers are offering this, why don't we have something like this?" But that might not be an actual customer need; just something the competitor has promoted and thereby created some sort of interest at the customer surface. (HQ)*

Many of the respondents indicate that there are issues that transcend both acquisition and assimilation: KAMs have a challenging job at getting to the core of the customer need and they may not know to what degree information about them should then be forwarded. Because the CRM tool is not particularly suitable for spreading best practices or used for such light communications, there is no unified systemic way to access the knowledge in the regions and getting it is largely based on personal initiatives and relationships.

Knowledge assimilation is therefore a dual system where formal systems and structures are sometimes augmented, sometimes undermined and occasionally replaced by informal relationships. While there is a general acknowledgement that knowledge transfer is beneficial for all parties, there are issues both in sending and receiving of messages, as is expected in a large company. What Delta is trying to foster is a sharing culture where people feel comfortable communicating with each other informally. The next chapter looks more in depth in the findings relating to organisational response to actions.

5.5 Knowledge Transformation in HQ – Subsidiary Relationship

At the most basic level, knowledge transformation refers to the organisational response activity to knowledge assimilation, i.e. the knowledge is combined with other organisational resources or existing knowledge base to create something new that, ideally, fulfils the initial requirement. The response may be formalised and require no transformation for the way the company operates or people work, such as a reply to a simple spare part or information request. A formalised response may also require tailoring but within defined parameters, such as modifying a part of piece of technology so it fits the customer's need but does not require innovations. Transformation becomes complex when it goes beyond formal responses and requires actors to seek answers outside the process. Services have less formalised processes than products, which is why the transformation phase may be more important in companies undergoing servitisation. This chapter looks at findings that refer to company structures in responding to needs.

5.5.1 Structure of Expertise

There's 12,000 specialists; it's about finding the right one. (Local staff, EMEA)

The regions will primarily solve issues locally and it is only when capabilities there are exhausted that requests for support are transferred to the HQ. Some problems can be solved remotely or only require information, but sometimes customers want the presence of an expert on site or the problem is extensive enough that it cannot be solved from afar. Most of the Delta experts are located in Europe, and more specifically in Finland or Sweden, which makes it fairly convenient for EMEA customer to request an expert visit. Traveling to NA or SA however takes time, which incurs costs, often great costs as expertise is expensive.

We have good expertise abroad but I think less and less... I guess they are less available than before. I think the message we got the past two years is: "Yes, you can get the support from Finland but there are less people available so you need to be more self-sufficient, North-America". (...) But to get a person from Finland to come here, it is very pricey for the customer. (...) So a lot of customers say: "We cannot justify that". But then we have customers who say: "We want the best of the best of the best". (...) But that's part of Delta, we need those guys over there, I mean they are the centre. (KAM, NA)

Expertise is in the core of Delta's offer, both in terms of the products and the people who support them. As the KAM in the above excerpt says, the experts, the people who fly in and solve the problems, are the centre. They act as messengers for the

brand, bring skillsets and support, and face the customer's complex solutions needs. While these are largely positive attributes, they also present something of an organisational problem.

*The fact that we work as stupidly as we do, that an in-depth expert like me spends 138 days a year abroad hanging around in lounges and airplanes instead of sitting here with headphones on my head supporting the regional organisation through Skype, that's our own flaw, our own stupidity. Working this way kind of **promotes a hero cult** that we've been building here. Hopefully in 10 years we have here the main core group who tries to stay put and using modern technologies - be it video or Skype or remote connection - is remotely close to the regional customer. And not like now that I have a Hilton diamond card and Finnair platinum, like "Yeah, I've sometimes visited home too..." But there's no point... These days I think that dispersing the deep knowledge geographically is not a sensible challenge." (HQ)*

Organising expertise so that it is simultaneously available and up-to-date is a big challenge for a company where the core knowledge is a major competitive advantage. This kind of knowledge needs to be updated constantly with a close proximity to R&D and project development centres, which happen to be located in Finland and Sweden. At the same time, the knowledge resources must be available at customer's behest.

What these conflicting demands have led to is a situation where a handful of capable, competent specialists travel from site to site. Their time and availability has become a scarce resource and there are signs of competition in reaching the desired person. This may create what the respondent above refers to as a "hero cult", a group of traveling persons whose presence is requested habitually:

*In some cases they would request a specific person. In some cases I request specific people because I know who should be here doing it. (...) It's about trust, trust, it always comes back to trust. If he has been here before and worked out well, we trust him to come out again. (...) They were sending me purchase orders in November or December to make sure they were held, guys they trust and guys who do a good job. **There's probably other people who could do as good a job but they just have this relationship** and trust with that person. (KAM, NA)*

*Because this guy has been many times there, supporting, helping them, and they say: "Okay, this is our guy. We'd like to only work with him, and that's all." **Which is really, let's say, complicated for us because, you know, the ability of our specialists is limited.** (...) Main reason is that the work was done well. And everything was really, let's say, perfect. Of course, you know, our specialists, they have a different working style. It's usually about the personality, the personal behaviour of the person or whatever. (...) But of*

course, there is another message: “Look, we don’t have to describe the problem from the beginning, because this person remembers, even if he has been here one year ago, then he remembers what happened last time, what he did”, so this is something in his mind always. (KAM, EMEA)

(...) in our culture here everything that comes with blue eyes and fair skin and long hair is better than the local. You are never a prophet in your own land. We still have some challenges to get the acceptance from our customers. We have a good team of service engineers, they are capable, they are skilled, they have a good spirit, they are willing to sacrifice their time to provide good service. But then [the customers] want the person from Finland to come and we have to say: “If he is even available, he is 48 hours away and you have a problem now”. (KAM, SA)

*What makes it challenging, beyond that it’s basically ‘human trafficking’ in that sense, is that in our business you have to have really competent people, experienced people who are then sold on. That’s our basic sale item. Like researchers say, our basic sale item is a pair of blue eyes. But you have to have competence and social skills too, and language skills, **you have to be the kind of person who can operate on all five continents.** If we had more of those, we’d have no worries. (HQ)*

Different reasons come up in the excerpts of why customers might request certain experts. Trusting someone they know and who has done a good job in the past, having a good working relationship with the person, and always dealing with the same person saves time. The two latter excerpts also indicate that the customer might not request a specific person by name but having anyone from this group come over might bring legitimacy and increase confidence. The service is therefore not necessarily the mechanical task they do but the presence of a trusted person, always of course provided that the problem gets solved. If the expert is not capable of solving problems, the loss of reputation has dire consequences.

*He doesn't have the competence and he is still there. In our industry we know each other, and we are amazed about it. Because the guy is not helping and he is still there. So that is like an inside joke in this industry. (...) when we raise a technical issue we say: “Don't call [him], he won't help you anyway so forget him and call [the KAM]”. It's amazing as a customer to see that Delta is supporting someone who is not helping themselves in the first place, and their customer. He is not competent. He's friendly, no problem. **He's old school tech peddler**, something I saw a lot earlier in my career, which is not needed anymore. We need technical sales competence, technical sales people, that when we call them they can answer our questions. And this guy, he can't, it's no use. So for me, don't call this guy, he's useless and he is being paid by Delta. I'm being very honest. (Customer, NA)*

*In this business there is really – and that’s with customers and internal players alike – the kind of thing that once you’ve been accepted as a professional, and there are certain rituals for that, so after that the VIP face and status work considerably better than how they would organisationally or through these so-and-so processes. (...) It’s the same thing again, that’s our bottleneck: We don’t have enough of the guys you can throw in the deep end and they start swimming. And that’s just the way it goes these days. **You have to be accepted.** And then it gets really tough if you get yourself in the books that you’re not accepted. Within a year or two you won’t be working here anymore. (HQ)*

While in a knowledge-heavy industry it is a given that an expensive expert must be able to work effectively and provide results, it is also typical for the industry that actors from different organisation share knowledge as they attend similar functions, network and change job positions within competitive companies. Thus word-of-mouth has a heavy influence on the image of companies and individuals working in them.

As the servitisation initiative is aiming to be closer to the customer and more customer-oriented in responding to needs, this has also implications for the structure of how expertise is dispersed. One possibility is giving regions more competence and resource to handle issues locally. The challenge is in the complexity of the issues and building the regional capacity to take that responsibility.

*But [solutions] are more challenging to build because our current organisation is product oriented, so there are not many solution builders. Not the kind of people who have that responsibility. But maybe the greater problem is that **the person who builds a solution like that, they should have some level of competence and process knowledge** so that they can do it. It’s very easy when the customer says: “I need this”, and then we give them that. But if the customer need is more intangible, not a specific spare for example but if they say they need more efficiency or more speed or less breakages or something like that. To build a solution to a problem or need like that requires already much deeper knowledge. (HQ)*

Finding the balance is therefore a crucial element in the servitisation process, as well as identifying the supporting actions that need to take place to build an infrastructure for continued regional competence and service orientation.

5.5.2 Commercialisation

The word “productisation” is widely used in Finnish business vernacular when referring to the process of standardising and intangible service offer into a commercial product, and is pervasive in the Delta HQ interviews. However, because it is rarely used in business or academic English, the word here is translated as commercialisation. The idea behind commercialisation as used here is that concepts and intangible services are formalised so that they can be offered in a uniform manner with transparency on scope, price, constituent elements and resources. There are many opinions on what constitutes as servitisation and whether the aim should be to consider services as products that can be sold and charged for, or to consider all products and actions of the company as service offers. Commercialisation is more related to the former approach but in a greater context of transformation can also be an enabling factor for the latter.

Within the research context, Delta is approaching servitisation from both ends. While the top level commitments the company strives for are aimed at making working with customers more a partnership, the grass root operative actions also focus on making services more tangible so that they can be included in product packages. Both are attempts to respond to the customer needs with flexibility and are not necessarily mutually exclusive, but the philosophy and way to reach the customer are very different.

*I represent service business but services are the products we sell. Some of them are tangible like spare parts or some components, some are consultative or study-type products. Or combinations thereof. There may be some larger maintenance packages that include some consultancy and some mechanical maintenance. This is the idea of the new concept; that you can build **like Lego blocks a suitable package for whatever the need** is. (HQ)*

This kind of offer portfolio that maps out what kinds of services are available simplifies putting together a solution on the regional level. Because there are thousands of parts and products and equally many ways of putting them together with or without external help, lack of any kind of shared guidelines means individual KAMs must always contact several different people to get the relevant info for one package. To do this as a proposal for customer just to raise interest or offer something proactively would be a massive drain on the resources and very time consuming. Clear guidelines would therefore move some of the early design work to the regions and give KAMs better tools to engage the customer in co-creation.

*Because [with commercialisation] **the KAM isn't all alone there** with their own limited knowledge and expertise, but they have this as support and it also*

*ensures quality. Because it's always the same and not a little bit different when somebody comes up with something else. If it has been described then the description will usually say what can be expected, in which case there will be no expectations, nor the image for bad service, nor warranty issues or such. (...) Commercialisation is the alpha and omega of everything; through that the service becomes understandable, it's easier to explain, it's easier to buy, it's easier to sell, it's easier to price, define it and so. So **services begin from commercialisation**. (HQ)*

Commercialisation therefore relates to dispersing responsibility to the regional level while at the same time unifying the offer in a more standardised format. Standardisation keeps the image of the company consistent across regions while modularisation ensures that unique customer needs can be accommodated within it. Tools like catalogues, configurators and IT systems can be built based on knowing the precise sales items that can be offered and what they contain. Additional challenges are provided by the complexity and great variety in the offers:

Then I thought that in this job we've calculated that from the pressure maintenance I can make about a million different variations so how are we going to type in what we are going to offer? (HQ)

Commercialisation is, however, ultimately a company-led approach to servitisation. A KAM, who knows the company's offer better, knows the products and services and how these can be sold in different combinations better, will presumably be better at selling in terms of volume and, ideally, customer satisfaction. Whether that consequently makes also the company service-oriented is still questionable. The customer – KAM relationship is the value co-creating relationship and commercialisation is an enabling factor for the KAMs to match the company offer with the customer need in a manner that is effective for the delivery to benefit both customer and the company. However, customer benefit and operational efficiency do not make a service company; thus commercialisation is considered a factor of the greater transformation process that helps and supports but does not necessarily fundamentally change the company.

*Ultimately it is the sales person or the person closest to the customer who defines what the customer need is and tries to match it with what we offer to the need. It's not that our products would somehow change but that **you can combine the products and services and from those pieces you can tailor the right solution** for the customer, and this is the responsibility of the person or the team at the customer surface. We want to improve that and give them tools to get closer to the right end-result. (HQ)*

5.5.3 Agreement-Based Business

The greater transformation includes the kind of contractual partnerships customers have with the company. Whereas commercialisation is a concept that mainly comes up in the HQ interviews, contracts and agreement-based business are discussed by HQ, regions and customers alike. Another difference is that commercialisation is aimed at transforming work practices for KAMs and making current processes more efficient, while agreement-based business has the potential to transform the way the company does business as a whole.

In the context of Delta, contracts can mean a variety of different things depending on the customer, the business unit or the equipment in question. At its core, a contract should create a reciprocal bond between the customer and the vendor so that the contract terms signify some level of commitment from both parties. Often this imposes time scales during which certain sales volumes are directed at the vendor at competitive prices or bonus systems in place, but they can extend to comprehensive outsourcing contracts where parts or all of the customer environment is maintained by Delta.

Contracts are directly mentioned in the customer interviews only a few times but the ethos of working with a closely committed partner come through from them. While contracts are beneficial to the customer – or, at the very least, a customer would be unlikely to sign one that was not – they also restrict choice and the threat is that if there are problems, dissolving the contract may be difficult. Contracts can also mean investments upfront that have to be realised over a period of time.

*One negative comment that I have heard is that they don't want to pay in advance for services, and that's what some of the agreements some customers feel that they are. (...) So it's a logical reasoning behind it but at the same time our focal point is to communicate that **in order to have those resources available when needed**, in our industry, we have to be able to manage those resources when they are not needed. That's where an agreement does tend to help. We've worked with this customer to understand that and they understand the benefits. (KAM, NA)*

...we've gone ahead and entered [an] agreement with Delta for our roll covers and roll service. All that information, we knew we were going to go ahead and spend more money upfront to get all our rolls back to OEM specs, so if you got a 5 year cycle, you expect the high cost but at the end of the five you got a reliable piece of equipment that you are able to maintain at a lower cost. We have not realized that and all the costs have been up here continuously. (Customer, NA)

These extracts are from both sides of a long-term, successful customer – KAM relationship discussing an agreement. An agreement provides resource availability

and stability, but it also creates expectations, as becomes evident in this case when those expectations have not been fully met. In this situation the relationship is used to solve the issues as there is a close co-operation and trust in the partnership, indicating a difference between the expectations towards the personal relationship and the organisational relationship. Resources are shown in the KAM excerpt as being once again the key factor creating limits for operations and sought after. This is corroborated in the following:

*But especially in my area, we have a lot of agreements, long-term agreements for two or three years, and in those agreements we are committed to providing **special treatment or a special response**. And that works very well. So when the customer has a problem, they have a priority and that works very well from Finland. (KAM, SA)*

*But I really feel that our field service guys are critical in the coming future and the knowledge that they have in order for us to continue to be number one in that category. That's one thing that could help in my role, if we had **additional resources** that we could pull from because we've had to, more than once we've had to work with the customer or move requested dates because of unavailability. I know there will always be some of that but it seems like that's our first response a lot of the times now and it wasn't in the past. I don't know if that's because the customers are requesting more, I don't feel like they are requesting more locally, or if it's because we just don't have the resource pool that we used to, to be able to do the field service. (KAM, NA)*

Agreement-based business creates predictability which allows getting more resources or allocating them early according to need. The company cannot hold slack resources because the cost of keeping people's expertise updated is high and also because finding suitable people with the relevant education and experience is challenging. The risk-factor that agreement-based business poses is that its prevalence can stretch resources to a breaking point at current resource levels.

*The agreement side is a double-edged sword, though, because when a customer signs an agreement they feel like they are at the top of the list every time. And we want them to feel like they're at the top of the list but at the same time if we have every customer in North America who thinks that they are at the top of the list, **we quickly run out of those resources**. So that's to watch out. There are expectations that should be met. (KAM, NA)*

Beyond resources, long-term agreement-based business can have other implications as well.

*And that is a very good example of how powerful it is when you have those agreements with a customer and especially if you have this mix when you have people coming from Finland and local people, this is a perfect mix. **You***

combine the customer inside knowledge with technology competence and the worldwide experience from the people coming from the outside. In that I think there is still more for us to do in that sense that we could refine those agreements a bit more even. That we get more synergies out of that, that all the findings of those people with the real technical expertise coming from Finland or elsewhere, that we can understand and work much tighter together to take advantage of that and convert it into sellable ideas to the customer. Because it is true that there are a lot of things that the sales people can propose and just sell, but there are a lot more other things that you can bundle into this. And this is where I think our people can still grow more. (Support, SA)

Sometimes, unfortunately, we work in islands. We say: “Here is procurement, here is productivity, here is sales”. We hope we can work more together. And the idea is how we can include there Delta. Now we are working with that focus. We can try to get better contracts in services for instance, some analysis, probably we can work to get something more corporate. **Sometimes we need more contracts and sometimes more communication,** working together another night when there is a problem, trying to see the future together. (Customer, SA)

In light of the numbers we would like to increase sales based on some sort of annual agreement - usually two, three, five year agreements - that it is based on an agreement made with the customer. It's then much more predictable, the cash flow. The sales effort is selling the agreement and delivery, be it parts or fabrics or it can include consultancy too, so **it focuses much more on creating customer value than on the sales work.** So hopefully the customer experiences that they get more value through the agreement rather than us always selling some single spare part pack or product. (...) Customer value comes up here in the way that it connects [the servitisation initiative] and agreement offer. In both we aim to emphasise the benefit to the customer and maximise our chances of offering some sort of solution. (HQ)

Agreements enhance the partnership through commitment and in order to make the agreement successful, both parties must share knowledge and work together, which in its turn leads to innovations and new ways of thinking. Partnership and knowledge sharing also creates a positive cycle in that the more you work together and solve problems, the stronger the relationship and greater ability to do so in the future. On the operative end, minimising individual transactions and systemising them as automated or formal processes can reduce administrative time from both parties provided that those systems are in place and operational.

5.5.4 Digitalisation

One of the main objectives of the servitisation initiative is for the company to become closer to the customer. In practice this has many applications.

*Like I said, how can we be close to the customer even though we are remote, even though we are far away? How can we give the customer the feeling that our experts are truly at their disposal and we are there at the site - in the future maybe as HoloLens avatars – **that you are truly there even if you're not?** Or then through some video connection or something like that which is already a current day reality, so I wonder what other opportunities will come in the future. But this is really tightly connected in the modular structure of the [servitisation initiative]. (HQ)*

Digitalisation is an acute issue in the modern day business and it provides a connection with the customer that in many ways augments and enhances the traditional sales model. The push for digitalisation in the paper industry comes from a recognised need for the customers to operate more efficiently in their contacts with the vendor, and therefore is closely related to agreement-based business.

Two main thrusts of digitalisation are found from the interviews: Remote connections and industrial internet. Paper machines produce vast amounts of data as they are operated but this data has traditionally not been taken advantage of except in reactive ways to analyse a problem that has already occurred.

In hindsight it is always easy to see that if we had spotted that in advance, we could have known something is going to happen but it was always unique situations. Now I really believe we are getting to analysing the data and that is the input we can provide for the customer. (HQ)

Making use of the big data the machines produce opens opportunities for the vendor to provide proactive and predictive services that can have a significant influence for the customer's operation. Because paper machines are profit centres and every shut-down signifies a loss in production, finding problems before they cause delays has a direct impact on the customer's profit line. Alternatively, remote connections enable faster response to problems because experts do not need to physically travel on site, which can cause resourcing issues for the vendor, and multiple experts can focus on their own specialty areas remotely.

From the customer side, remote connections can present issues and benefits.

*Our internal process engineers have the ability to remote in the DCS systems that run the machines but we don't have any vendors that have that capability to do that. It's kind of a security type thing. **We would view it as a security***

issue to allow that. (...) When I was in [company X] they did have a Delta DCS system and they were capable of remoting in. So after we did install that Delta scanner, they were able to remotely look at the performance and make changes. So we had some things around our colour controls not marking properly so they could remote in and do some logic changes and improve the colour control and that worked very well. (Customer, NA)

Information security in the highly competitive industry can be a serious issue, as well as multivendor solutions being very common. In cases where all or a majority of the customer's infrastructure comes from the same vendor, installing the platforms required to access the data is easier than when there are multiple vendors and it becomes unclear where the data is headed and who is collecting it. While such issues can be overcome, customer policies may be restrictive in this regard.

Remote access can also facilitate daily operations and minimise the administration of transactions.

I see that in the future, and it can be already near future, we will integrate the customer's operations system and our system so that when the customer has some need they can send a purchase order and it swims directly to our system from where the delivery process initiates. If the item is in stock then the impulse goes directly there to deliver this. We are very heavily going towards this type of business process development. (HQ)

Industrial internet provides another avenue for digitalisation but within it, there are many ways to access the customer. The typical platform for industrial internet is a website for ordering products and contacting the vendor.

*It would be very valuable if I could go in and log in to www.delta.com, and access - and it may exist already but I just haven't taken advantage of it - any of their equipment and have detailed operations maintenance manuals, or if I need to find parts or anything. **Something that I could put into a database and help me find what I need.** Troubleshooting guide. And they might have something like that but that would be a huge help to me, because that would be another way of seeing... when I'm talking to someone and then the operators are working on something and I already have the database and I'm going ahead and have access and define what the problem is. (Customer, NA)*

But my main when I need something, I always call [the KAM] anyway. That's the way I... But I know they have a nice website, I've seen it. But I don't ask for technical service through the website, I don't. (Customer, NA)

In a knowledge heavy industry such websites are not necessarily an easy application. There are thousands of products and the true skill is in understanding the optimisation of how they work together and where service is needed to make the installation work as a whole. Additionally, handing the reigns to the customer can potentially lead to a knowledge drainage that at the worst case scenario inhibits product development:

*Tailoring products is not learned in any schools, you have to learn it by doing. Everybody makes mistakes and learns from them. That's one thing I'm a bit sceptical about when I was just at a course where they were hyping how the industrial internet arrives and we'll put everything in the net and the customer just chooses from there. Problem is, this is a consumable trade and 100% face-to-face. We still have to... like the classic cliché is that we provide for customer needs and the customer doesn't want to exchange a peso for a peso, they want the exchange rate to be one-and-a-half. We have to develop something better and **in order to be better we have to know what happens at the machine and what competitors have done there.** (HQ)*

Another method to utilising the industrial internet is a community-based approach where instead of individual customers pulling information from the company, customers come together as a community, share information and interact with the vendor. These types of applications are still new in the industry and customer activities in social media in general vary wildly from active usage that adds value to operations in information seeking and peer networking, to outright professions of not liking social media, not finding value in it, or, as one customer put it: “*I hate social media. (...) Everything is going social media these days, that's no, no, no. I don't like it.*” (Customer, EMEA)

On the whole, digitalisation and modern communications technologies are providing opportunities that mean knowledge can be shared easily and instantaneously beyond the customer – KAM interaction or face-to-face. This does not, however, negate the importance of those relationships but rather provides an additional route that can be used to elevate it.

5.5.5 Barriers for Knowledge Transformation

Many of the factors rising from transformation represent both threats and opportunities at the same time. The initiatives to change the company are generally company led rather than responses to specific customer issues or requests, but they are based on the needs and trends the company has identified at the market place. Possible barriers for carrying out transformation identified by HQ actors are the current organisational structures.

The matrix structure where regions have the business responsibility and HQ provides technology support provides authority to the actors closest to the business frontline but also complicate pushing through change initiatives.

Everyone has many bosses and we're growing a joint pile. It's challenging because you can't always give direct commands. You always have to go through the line managers and that has its own challenges, to both sides. (HQ)

No one is under us. No one has a duty to report to us. The results are not reported to us. (...) We are in a matrix where we have the technological knowhow and this kind of responsibility but we can't do anything except consult the regions: "Could you please do this?" (HQ)

In practice, operations are not in our organisation but sales are in the regional organisation and production in its own organisation. So there are very few direct – manager – employee relationships. But then figures are our responsibility and we report them and we are asked why certain things aren't developed or implemented. The expectations don't really match. (HQ)

In that sense this is a nice kind of structure that [specialised sales people] are formally under the regional organisations but then I'm responsible for sales and pricing and specs and all this kind of stuff, and there are all kinds of issues there. (HQ)

These extracts are largely in reference to meeting or increasing sales targets rather than bigger developmental initiatives, but the principle is that HQ actors find it challenging to operate without clear authority. This is in stark contrast to much literature focusing on the managerial level in subsidiary – HQ relationships, where the subsidiary mandate and authority is in question rather than that of the HQ.

Another structural issue is keeping up a direct contact with support functions and business operations to ensure that the right things are being done:

A common challenge is that this is clearly a shared development function or support function and then there are of course a lot of things that are done or naturally happen inside the organisation, be it business unit or regional organisation, so getting into them in the right way and feeling that you really are helping them. (HQ)

*This is a big change, not just for marketing but all in all for sales, because thus far everyone has had their own product but now you have to start looking at things from a wider angle, how you can sell solutions and bigger packages. (...) I don't know if marketing contact to customers increases, I suspect it would stay at the regions and with [KAMs], but we have to build some sort of natural contact there, so maybe **increase co-operation with the regional organisations.** (HQ)*

In addition to the structure between regions and HQ, there is also the wider Delta organisation. Service is just one part of the company and it operates separately from for example capital projects, where the service initiative has not been implemented. Maintaining unity under the circumstances presents an organisational challenge.

The challenge is in that our organisation the experts are spread around. We have a tremendous – that's the reason why I joined Delta – technology knowhow and really good people and we have a target to grow globally. That's a good foundation but it has been organised largely to support certain products. (HQ)

Knitting together the different parts of a big company both horizontally and vertically and across cultures is therefore important for the efficient flow of processes through them.

5.6 Knowledge Exploitation in KAM - Customer Relationship

In the original model by Zahra and George (2002), exploitation is the final phase of the knowledge absorption process model. Simplistically, this would imply that knowledge absorption ends at the point when the solution is implemented at the customer site. In a partnership, of course, knowledge exploitation is merely one step in the value creation process, namely the step when the offer is presented to the customer and monetary transactions take place, leading to further interactions and renewed acquisition, assimilation and transformation within the sales cycle.

Within a continuous partnership the exploitation phase occurs constantly. The customers have a consistent need of spare parts, advice, new equipment, consumables and other goods. In this chapter I will focus on the findings that were mentioned in the context of the direct customer relationship in terms of the customer willingness to buy something or to engage on a higher or deeper level with the vendor.

5.6.1 Advisory Role

Delta does not have an official consultancy business or offer consultancy services as such. While the service portfolio includes consultancy elements such as audits and diagnostic, the company offer is portrayed mainly in terms of product expertise. This formal lack of a consultancy business line does, however, not preclude Delta from having an advisory role.

*One of the areas where I see - and this is not just for this paper mill, it's industry wide - is that the talent pool is shrinking within the paper industry. **We have a difficult time trying to find qualified people** to do the level of jobs that I am in. (...) So recruiters struggle to fill roles like this, because people don't want to move and you know a lot of people have left the paper industry, or they don't get in the paper industry anymore. I don't know what Delta is going to do to fix that (laughs) but I think one area, and it kind of comes back to that knowledge exchange or educational side of it, that if there was like a Delta school that somebody could go to get some knowledge there, or training there. That could be something they could be involved in. (Customer, NA)*

As the paper industry is undergoing changes due to decreased intake of talent and retirement of current knowledge assets, vendors like Delta are expected to take on a greater role in providing expertise. This ranges from formal training given to customer representatives to taking a proactive lead in developing operations and innovations. However, the expectation that business would increase as a result of customers relying more on vendors has not, as of yet, made a great impact. The customers find alternative ways of coping with the changed situation and as the industry shrinks, less money can be used on outside resources.

We have been saying that for 10 years and it's not just because they are closing, it's also because of the older people that have 30 years of experience, all gone. Some of the mills are rehiring them as consultants when needed. I was at one company site and they said: "We don't do that anymore because it costs too much money". So a lot of the mills have young people on board with less experience, so you would think that they would rely more on people like us, but we haven't really seen an increase in business. (KAM, NA)

From the vendor perspective, an advisory role in the planning stage of business development makes sense in competitive situations. Early involvement in defining upcoming needs is also useful in making sure that the company's offer will ultimately be a good fit for the call for tender and/or customer expectations.

*I think if [customers] say what they need, we kind of missed the boat. I tend to believe that **if they know exactly what they need, someone, a competitor of ours, told them that's what they need**. So when this happens, I will try to find out why they are saying this because my main goal is to get back to what the issue is. And to really see that, and if they say: "I want this equipment!" you ask why, you ask the questions that really go back to the root. When you know what the problem is then maybe you can say: "Well, maybe we have a better solution". If they say: "I want this equipment, give me a quote and I may buy it in three or four months", I think we already missed the boat. (KAM, NA)*

*They are the experts in whatever field they are providing information on. So I'm relying on them to give me the best solution to the problem. Not lie out different options and say: "Hey, go pick the one that best suits you". They need to be with us, **helping us make good decisions** for our equipment on our mill operation. (Customer, NA)*

There can also be a flipside to early involvement. On occasion this can lead to the advice being used as the yardstick against which other vendors are measured, utilising the expertise of one company to design the solution but procuring it from another. This is the risk of the advisory role where the role can generate trust and image benefits but it might not always lead to sales.

(...) we were very quick to come up with proposals for the [equipment]. [An expert] came over from Finland, we sat down, met with them, discussed it and wrote a proposal. But then they went to a competitor and they waited for the company to close a proposal. Maybe we were too quick... but I don't think we were too quick, I think the problem was we were there so frequently and then they wanted to take the time to approach the competition. (KAM, EMEA)

Customers in general do, however, expect the partnership to provide them benefits beyond merely responding to identified needs. Taking a proactive role and making suggestions for optimisation and improvement is generally regarded as an important factor for experiencing value among the customer respondents and thus a gateway to a deeper level of engagement.

But I like the supplier who calls me and tells me about stuff. "We did this and this," or "This is something we did at a mill we could propose to you". I like this. (Customer, NA)

If they have something, a better widget or gadgets that we could use in the pulp, then that would be a huge asset for us. You asked me about the value, that's almost where I would expect some of my vendors to step up and say: "We can help you. We know what your limitations are, let us help you. If you're having problems with a paper machine with brakes, let us help you. You are having roll cover issues, let us step up and help you". That's what a partnership is. (Customer, NA)

The proactive approach in an advisory role is also closely connected to working together in long-term planning and development. This is different from the above in that the vendor takes the lead in investigating and analysing the current operation, while long-term planning focuses on making future-oriented development plans together.

I think Delta works in the spot sale with [us]. This equipment or this start-up. But, even though we have a long-term relationship, we don't work long-term

*together in this equipment or this process. I have this feeling, you are a very good supplier, a technician, your know-how, but we say: "We have a problem, hey Delta, come here and make a solution," or "I need spare parts, well, how many months or weeks?" Twelve? "No, I need eight." Okay, ten. "No, nine." **You are a fireman.** But we don't work together in that I would say: "Hey Delta, check this line, this process, this equipment. Can you make a brief about what kind of spare parts and maintenance we need?" Or that you would check the evaluation of the maintenance process to find out if there is more production or less detention. I suggest you change your focus. (Customer, SA)*

The servitisation transformation is also looking for ways for the company to become more proactive in its approach; especially as pertains to adding service offers. Bringing this in practice to the customer surface will take some time but the recognition in the top level is that Delta should be making the industry.

*I think a majority of the case are where we are the more proactive party. If we think about selling a new machine and gluing a service package to the side, so at that point **the customer doesn't even know that it is possible for us to deliver this kind of service.** Then in practice it's me and a few other guys defining that this kind of package would fit the customer needs. So then it's us coming up with the idea, developing the solution that this is what it could look like. (HQ)*

*From the customers, I think their firms are thinking a lot about what digitalisation means to them, what analytics, what big data they have. They are doing their own projects and of course since we are a big vendor for them, they will ask what we are doing that would benefit them. Because that is one of the most important things in a partnership: that you can trust your partner to develop these things. So you don't have to develop them, but they will deliver them and then you can develop your own business with your own customer and in the best case scenario it of course links together. But **the default expectation is that we will do the development.** (HQ)*

Delta's capability to take on an advisory role is in its knowledge assets both from technology and from the international network. The former is a requirement due to the complexity and unique set-up of the machines. Wide knowledge of the industry can be leveraged for learning and the position as the original equipment manufacturer (OEM) brings the expectation of knowledge, which can be used to handle issues quicker and design more accurately.

*One of the reasons why I like to work with Delta is that because they are the OEM, they have a lot of knowledge, they have a lot of history of our machines, so all their original designs, they have all that information. **You just have a lot more confidence when it's going to be built, that it's going to fit when we install it.** (Customer, NA)*

*So what does working with Delta bring us? It brings experience, it brings knowledge. **They are not just working in our sector, they are working in various sectors across the world.** So they are bringing that knowledge of paper making equipment, the R&D that they do. They are challenging the norms as well. Obviously they are trying to produce paper making equipment, obviously cost effective equipment, to run better stability of the machines, to give better efficiency. They are developing their products to be able to sell to people like us, obviously to develop our markets as well. (Customer, EMEA)*

Having knowledge from various international markets is also seen as a benefit, as has been already earlier discussed, because it gives knowledge and experience:

*It's about the knowledge transfer. Delta is working with people in China or with people in Japan or South Korea or wherever. I have been in all these places with Delta. They're developing their equipment and knowledge in these other countries. I don't think we are brave enough in Europe to develop too out-of-the-box equipment on our machines whereas maybe China and these other places are. So I think that Delta certainly uses these other places as test beds. But for me to be able to travel there and see it and then **to have the confidence that it's running there and then develop it and put it here in the UK, yes absolutely, it brings us back huge benefits.** (Customer, EMEA)*

*I believe, first of all, in this industry, you need experience. And if you have experience, then you have a clue, then you have knowledge, also. These two issues they are looking for. Because if you have experience, you've participated in many actions, many services, what's happened all over the world with bigger machines, so you know, most probably, how to solve the problem. Or **maybe you know, even, how to prevent this problem not coming next time.** This is most important for the customer, to know how to prevent this problem in the future. (KAM, EMEA)*

Taking the advisory role can therefore happen in different ways and various parts of the customer relationship. Early involvement in development projects can focus the scope of the project, while evaluation and analysis of daily operations and work processes can lead to new projects or opportunities. Providing training and other knowledge assets can improve the customer's profits, which in turn makes them better able to invest on improvements. This suggests that new offers and commitment to long-term planning improves communications. Ultimately, an advisory role is a mind-set towards the customer not just as a recipient of goods and services but as a partner whose operational efficiency is directly tied to your own.

Delta is part of our team here (...). Together we can figure anything out but I need them to be honest. I don't feel that someone who is coming here and all they're trying to do is sell me something and has no ownership of the program...

*then I have no need of them. There is no value to that. So I think one of the strongest is ownership from a company like Delta and having a stake in the operations of the company. In other words, **they feel like they are part of the team and they are contributing, they own the process.** (Customer, NA)*

5.6.2 Trust

Going into a new project, going in with a new company that you don't know and don't understand is always more of a risk than going into a project with someone you know. (Customer, EMEA)

Exploitation take place in a relationship and one thing that comes up over and over again in the responses is trust. As has been earlier established, the customers in the industry tend to be risk averse and value in services is largely based on ensuring the efficiency and reliability of the solution. Customers operate under conditions of complexity and uncertainty and rely on outside expertise to make the right choices in the long-term, whilst operating under financing restrictions due to the increasing competitiveness of the industry. To relieve these dual pressures customers are looking for trusted partners to make sense of the variety in offers. This trust can be based on both the personal or informal relationships and the organisational expertise and gravitas.

The primary relationship for the customer is with the KAM and some of the customer respondents preferred to limit the contact to this one person.

To me the value is that you know [a network of support] is there and you can get the help by going through [the KAM]. (Customer, NA)

On different levels of the organisation or in different situations, informal networks between vendor and customer can be seen as a benefit, however:

*Like our automation guy, he's calling somebody in Delta, and they respond with "Hey, I'm in Singapore but give me five minutes..." But he's discussing. He's not saying "I'm in Singapore so forget it," or "No, I cannot do it because you have to place the order, call the helpdesk." So it's nothing like this, they're discussing with us and I don't remember anything like this from the past. **This is effect of the long contact the teams had working together over a year. They built certain relations and it is working.** I don't know if I'm right or not, I'm just wondering why not before and also not with other suppliers, and the only reason I can come up with is that long time we spent sitting here, doing things, installing the commissions. (Customer, EMEA)*

Friendships created over projects and working together over the long-term can later have a knowledge spill-over effect whereby informal networks between customer operatives and the vendor are used to by-pass lengthy processes or heavy organisational structures. If abused, this could of course have adverse effects, but as a parallel support it creates the experience of added value.

Friendships and personal relationships are also important to foster meaningful working relationships and trust through knowing the people you are relying on to build important infrastructures of your operative environment.

*We've always been very lucky to have had very good working relationships so my memories of Delta are all the friends I've made. We don't just have meetings on site, we also have meetings in Finland or wherever. I've travelled all over the world with Delta. I've always enjoyed the social side of that. Don't get me wrong, it's all professional and all that, but the social side of working with Delta, it's really important. **You actually build those working relationships on that social side.** It may or may not be something that I should be saying, but we have very good meetings where we cover an awful lot of things but then afterwards we go out in the evening, we go out for a meal or we go go-karting or in different kinds of events and that is when you really get to know the people. (Customer, EMEA)*

Trust in personal relationships is, however, only one side of the coin. Confidence that the project will be successful is also built on the merits and experiences of the company. In the paper industry this typically manifests as references and communications through the peer network.

*I feel more confident as a buyer when I can see one that is already running. And talking to these mill people, I mean these are Delta but YOU, do YOU like it? Is it reliable? What were your issues? What was Delta service? So **I can share with people like me. That's good for us. To me that's risk management.** Instead of going with a smaller supplier, less expensive but no record. Sold with less experience I would say. So Delta may be a little bit more expensive but you have less risks to have success at your project. So this world wide experience for me for sure is a plus. (Customer, NA)*

*Because sometimes we know someone is doing something interesting somewhere. We cannot contact them directly, there are no possibilities. So of course Delta can help us, they can invite us there because they are also a customer. So they are talking and agreeing. And then when we meet, we keep in contact later. It's always better to meet face to face and then they stay a contact for later. You can pick up a telephone and you know to whom you are talking. **There are a lot of mills and we are online with them in contact.** And this sometimes goes against Delta (laughs). Because they're saying: "We are running in mill X, and we installed it and we are running nice*

*things". So we call this mill and say "Hey, we had Delta people here and they say you installed this," "Yeah." "Are you happy?" "Weeeeeeeell..." (laughs) So this is a little bit against them - I'm joking but still, **we can verify what they're saying to us**, and if the results are really like this or not. But definitely they are helping us getting in contact with other mills so this is also added value. (Customer, EMEA)*

Delta's role as the intermediary between customer companies facilitates direct knowledge exchange between them and brings them added value. At the same time, a satisfied customer is always the best sales person, because they do not have a sales agenda. Delta will also develop their image as being trustworthy because they are willing to have customers tell both positive and negative experiences about them.

If you can put to the table on one side the customer, on the other another customer and they are talking, they're really discussing and exchanging information, this is the best confirmation. So you do not have any presentation of what kinds of dispersers or refiners we have or what they are doing, how they are refining, what is the process, what kind of energy savings you can get and deliver. This is important when you start your first meeting, but if you have the possibility to make the reference trip and these two guys will sit together and talk! Next time, you do not have anything. It's... you could be sure that they will buy it. (KAM, EMEA)

In Europe and to some degree SA this free knowledge exchange seems to be the industry norm and competitors are quite willing to discuss their set-ups. In NA there are more restrictions and companies would not necessarily share knowledge with competitors or be allowed to enter a competitive facility to see how the equipment is working.

I don't know what a reference visit is. (...) I don't think they would allow us to come to another paper mill. That's what happened because [we] won't allow other people to come up and see our mill. That's not an option. But if you go to other [within corporation] mills then for sure. (Customer, NA)

Trust is an issue that overlaps with many different factors that influence the knowledge absorption process, because it is such a fundamental element of human interactions. Because of the prevalence of mentions in the data, it merits an entry of its own if only to understand the separation between trusting people and trusting the organisation and the technical expertise. In terms of servitisation, the aim seems to be to widen the scope of the trust base. The company image has for a long time been built on the reliability and quality of the equipment and technical knowhow. Servitisation can build on that to extend it to being a trusted partner.

5.6.3 Barriers for Knowledge Exploitation

Human resources in services are an issue that are raised multiple times in the data. Large scale reorganisation and change programmes in the early parts of the 21st century left the company operating lean with the focus on efficiency and removal of duplication and slack resources. In the following period the organisation has not undergone disruptive changes, giving management the possibility to grow business and operatives to focus on refining work practices, which is generally seen as having been beneficial. The market, however, has changed and responding to the current environment with the existing resource pool can be seen as challenging.

That's the paradox that there are only a few, a handful of people who are doing this. And on a global level, there are only two or three people. Of course in the projects there are more. And in projects we try to get the activity to the regions as much as possible. All in all, the direction Delta is going, I think the role of the regional organisation is going to grow. (HQ)

From the customer surface also comes messages that knowledge resources, which can also be understood as knowledge standardisation and central repositories of knowledge rather than individual people as human resources, are difficult to come by.

*I have a team working for me in here and we are always chasing for the right information. We are always chasing to find the right people. So we spend a lot of time to get that information so we can put the project together. So being transparent and open and having the right people from the beginning is very important. And that transfer of documents and transfer of knowledge always takes a huge amount of time. Things could of course always be better but that is probably the point where loss of **time is wasted trying to secure the right information**. (Customer, EMEA)*

While there is a general indication that resources can be difficult to get hold of and getting the most desired people means having to book them months in advance, there is a more specific type of resource required for servitisation, as the result of providing solutions rather than individual products. People who would have the ability and knowledge base to understand whole entities are scarce.

The KAMs are increasingly expected to know a little about everything so they can spot opportunities and have starter level discussion by themselves. Product specialists, on the other hand, need to have a deep understanding of their own specialty area of products. What is needed are people who would understand quite a lot about most things so that they could put together solutions including products

and services from various parts of the paper machine and the processes relating to it.

And there are experts for many things but then who would look at the whole is another thing, so we're are looking for a person who develops the product and then would become the product manager who works closely with the experts. (HQ)

*The whole clue is that when you asked how could we connect these crosslinking business units, so we actually had in this (...) course (...), we had a point there that why don't we have – and it would increase organisation and bureaucracy – but this kind of more senior level guy and then when we get a bid for proposal for a paper machine, they would go through it a bit and limit the zone. As far as I understand, **the KAMs won't have the time for it**, depending a little on where they are and how many mills they handle, but they can't do that. (HQ)*

In terms of resources, therefore, the point is not to increase resources across the line but rather there are specific areas related to service or solution development where resources are scarce and they may limit operations and therefore exploitation.

5.7 The Relationship between Servitisation and Value

After looking at the different phases in absorptive capacity and all that pertains to them, a picture starts to emerge of a company in transition with lots of balls in the air, travelling at various speeds. The aim of the company is clear: it wants to be more customer-oriented, to operate in a closer partnership with the customers, understanding what they need and being able to respond to those needs effectively and in a standardised manner that do not require additional resources or constant reinvention of the wheel. The servitisation initiative is the structure in which all this change is expected to take place with multiple projects running under its umbrella, to ensure that customer needs are met from idea to implementation.

So where do the ideas come from?

You know a lot of that is going to come from a company like Delta. What we do here, we don't have that kind of facility or research department. We are not really a research company; it's not possible for our company to do a lot of research type of work. (Customer, NA)

When I think about my old customers then, sure, there are some thoughts and ideas coming from there about how things could be done differently. But they are ultimately pretty traditional so at the end of the day we don't get so many

thoughts from them. Maybe discussing together with the customer you could get to the best results about different ways of doing things. (HQ)

As seen before when discussing innovation and partnership, a lot of the responsibility for innovating, guiding the industry, proactively improving efficiency, and optimising operations is expected to come from the vendor. The vendor has the technological capability and resources to test and develop products, while the customer's primary focus should be on the needs of their own customer base and how they can best operate in their industry. And yet, while the big innovations and the industry forming disruptive ideas can – and perhaps should – come from the vendor, there is a layer below that where thoughts are exchanged through dialogue, and it is at that level that servitisation concentrates.

An example from an unrelated industry could be the iPad, which revolutionised the way people connect with their devices in their daily lives. It would not be reasonable to expect a consumer to innovate something as exceptional as the iPad, which required technical and industry knowledge at a high level. Where consumers are expected to, and do, co-create is on the level of apps, which operate within the equipment parameters and rules but enhance the user's experience. Similarly, Delta customers experience value-in-use from their equipment and while they do not need to invent new equipment, their use of the machine gives them insight on what takes time, what causes problems, what compromises safety, and what is unknown.

Harnessing these insights goes through a process where they are recognised as desirable or relevant and then actioned on different organisational levels. There is an enormous amount of variety in how the process can go from the originating point through formal or informal systems. Sayer (2000) presents a critical realist view on causation where structures lead to outcome events via influencing mechanisms, shown in figure 8. The aim is to uncover the structures and mechanisms and consider them in context in order to create a plausible explanation for why events happen the way they do. Here the structures and mechanisms link directly to the servitisation initiative. While figure 8 is illustrated as a series of arrows, the objective is not to present a neat statistically proven model for quantitative research but rather use language, analogies and stories to arrive at an explanation that makes sense in the context of the research.

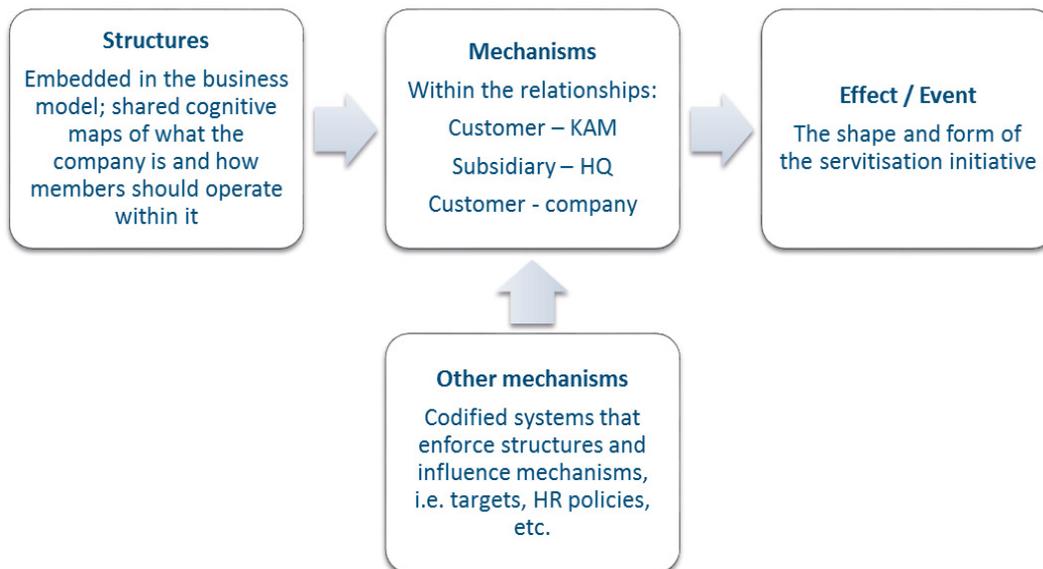


Figure 8. Critical Realism on Causation (adapted from Sayer 2000: 15)

Structures in the context of this research are the norms, beliefs and values that people hold about the company and what it should do or be in the market place. The formal manifestation of the structure is the business model, but where the business model encapsulates what the company aims to be or wants to do, underneath that is found the level of what the different actors – customers, regional staff and HQ staff – expect from the company or believe is expected from them because of the business model.

As earlier discussed on interpretations of value and service, customers on the whole value a partner who takes a responsibility over the customer infrastructure and is proactive in trying to optimise the machine base and available to support and help so that the customer's profitability stays up. The same actions and events were viewed by the regional staff in terms of having a good relationship and providing operational efficiency, whereas the HQ perspective on, again, the same phenomenon was more in terms of monetary gains the customer receives. On a structural level there are differences on how the business model of the company is viewed and what it is expected to provide, even when the actions – technology development, delivery, maintenance, etc. – stay the same and should be carried out efficiently regardless.

The servitisation initiative of the company is aimed at being more responsive to the customer's expectations of how the company should operate but it is a large umbrella of activities, only some of them which are directed at services or a service mind set. The way the servitisation initiative is rolled out, it is an opportunity to make organisational changes in existing processes that make them work better but

not necessarily work differently or in a more service-oriented manner. From the company's point of view it makes little difference, but for meaningful results for servitisation research the distinction between change project to become more service oriented and concurrent change project aimed at being better at selling products is notable.

The mechanisms that lead to events are not defined as systems or even, though the name might so imply, mechanical processes. Bhaskar (1979: 14) defined mechanisms as the way things act, thus causing an outcome which may or may not be replicable. Multiple mechanisms act together and the conditions, generally other influencing mechanisms, in which they are activated, lead to effects that are unique (Sayer 1992: 116). The word mechanism can be misleading and suggest something rigid or designed. Easton (2010: 122) describes them as deep generative processes and structures to capture their nature as influencing events but often in unobservable ways. While mechanisms are imbued with power to enact change, often they are regarded in the level of things or entities, rather than given a personhood.

This research posits that the main knowledge-laden mechanisms leading to value creation are the relationships between actors. The first two relationships are between customer and KAM, and subsidiary and HQ, and they are proposed in the theoretical framework. The findings show that personal relationships are important to the customers in providing a trusted person who represents the company and the unit level relationship operates as a basis for the value offer. However, a third relationship emerges from the findings and this is between the customer and the company. While actions take place between people or between units, the customer's expectations and mental attitudes are inextricably linked to the relationship they have with the company as a whole.

A number of supporting mechanisms have been covered in the previous chapters. Table 16 draws these together and shows how they link to the three main relationships at the core.

Table 16. Conditional Effects of Mechanisms

Customer - KAM	Subsidiary - HQ	Customer - Company
KAM role	Silos	Advisory role
Local network	Culture & language	Expert structure
Global network	Management structure	Digitalisation
Knowledge standardisation	Communication systems	
Offer	Support structure	

The conditions are not exclusive to the groups but overlap freely. For example, knowledge being structured in silos means that the knowledge transfer activities between subsidiaries and HQ are delineated accordingly and consequently no-one might get an overview of the situation and respond with a holistic solution. However, the consequent effect is that the KAM might not have all the knowledge they need to share with the customer, affecting the personal relationship, and this in turn has an impact on how the customer views the company. These “conjunctures” (Sayer 1992) or multiple ways of combining mechanisms are what lead to unique outcomes.

The classification here is based on who is the primary intended target for the servitisation project, where applicable, or how wide the level of influence can be expected. Thus, silos are under subsidiary – HQ because the servitisation initiative aims to increase operations across silos in order to benefit knowledge sharing on an organisational level. Offer, however, is listed under Customer – KAM because, while initiated and run by HQ, the ultimate goal is to provide better tools for KAMs to build the customer relationship. Culture and language, however, are a macro-level mechanism but their main influence is on the cross-cultural relationship between subsidiary and HQ actors, hence the position.

The outcome effect or event is the servitisation initiative and the form it takes in the company based on the unique configurations of mechanisms. These include other mechanisms as codified systems that form the company (e.g. budgets, targets, career paths, etc.) that are not necessarily part of the servitisation initiative but are still included in the company landscape and inform it.

If these are then the knowledge mechanisms that connect servitisation as a structural change to value, how then do the actors in these relationships view them in their own spheres? In the following chapters I will connect the results to a more cohesive narrative from the perspective of customers, KAMs/local staff, and HQ. Through this I will try to show how these perspectives differ and what their structural implications may be. I use interview extracts to illustrate my points but where the issues have been already highlighted in Chapter 5, I will omit the extracts to prevent duplication.

5.7.1 Customer Perspective

Customers inhabit a space within their own business context, which influences their relationships with the vendor. The mill managers are typically under a lot of pressure because they are responsible for the continued operation of the ultimate profit makers: the reliability of their paper machines and the safety and capabilities of their people. Industries that are shrinking are obligated to cut costs or change products. However, this means more competition in profitable industries so the pressure is growing equally in those. Growth can therefore be a mad dash forwards to avoid looming peril, but in practice change processes are very expensive, very time-consuming projects that can decide the company's direction for decades forward. Adapting to the environment must be balanced with a long-term understanding of where the industry is headed.

*Just down the road there was a mill printing newspaper and that's stopped, and the graphics in the street has just completely died down. Whereas the packaging industry and brown paper is on a slight incline, so **we are in the right place at the moment but that could change**. It always does, and the big thing is that it is also cyclical. Mind you, we always think that we are at the bottom of the cycle; we never seem to get to the top (laughs). (Customer, EMEA)*

Different parts of the paper machine can be rebuilt, changed and altered to ensure the stability of that equipment. But then you are looking to the future as well, thinking how you can challenge the norms of paper making: What can we do to develop these machines, to develop the site efficiency? How can we be more energy efficient, more cost effective to produce the product? Sometimes products change, sometimes markets change. (Customer, EMEA)

Under the force of industry pressures to stay competitive and organisational pressures to cut costs, customers are demanding more innovative value from vendors but generally less inclined to make large upfront investment without a quick return on investment. An industry that for decades has been stable and

reliable for entire communities to build their livelihoods around is now undergoing unprecedented turbulence, which can make managers hesitant to tie up money on incremental improvements, while at the same time the traditional risk-averseness of the industry may inhibit disruptive innovation ideas. Furthermore, the perceived decline in the industry means new talent is less inclined to enter the job market and expertise is increasingly sourced outside the company.

What customers want under these circumstances from the vendors is partnership and advice, operational efficiency and improvement, and innovation. Partnership takes on many forms in the customer data. One customer explains it in terms of stewardship, wanting the KAM to show that they have a personal investment in the success of the customer's business.

*I used to work with this guy (...) and he was vested in this operation, he owned it, it was his equipment – not just the chemicals but how he felt about it. We called him out to troubleshoot things. And that's what separates it. **Now we just have people who are selling** chemicals, selling equipment. And that's tough. So the value to me is the ownership part. (Customer, NA)*

Some customers themselves are looking to develop partnerships to become more in-depth and meaningful, recognising a need to work to a degree of integration to get the best possible solutions and efficiencies. The partnership is therefore more on the company level.

*I think we have too many things to do and I think **we need to work more together in both companies**. At the moment Delta is working on many important projects with [us] and we have to think how we can work better together. Thinking of maintenance people, thinking of projects people, thinking of improvements for equipment. I don't know how, but [our company] is looking to change the way they manage partners, for instance Delta. How we can work together for performance areas, for productivity – how we can work all together. (Customer, SA)*

Others, however, do not.

I really wouldn't have the time to have this network of people to go through. When you get into that a lot of it is paid for service so I wouldn't see how I would have the email of a person in Finland and I would shoot some ideas or that sort of thing. Typically what we are communicating with those people or working with them is as a part of a project or a paid service that we are using. (Customer, NA)

Thus, while partnerships are important, they are not uniform. The customer can experience a sense of partnership at the personal level with the KAM and/or at the company level with the Delta. Possibly because the interview subjects were chosen

by the KAMs, no interviewee felt unfavourably towards their KAM, but in one of the cases the customer was markedly disappointed with the performance of the company.

They have good quality products, it's very good, they deliver on time and execute but once it is done, you run to them to get help. You need to ask, you need to get angry before it moves. (Customer, NA)

A series of issues with a piece of equipment and related lack of efficient project management created a negative image for the customer about the company. While the customer expressed themselves in much more explicit terms about the company with words like “angry”, their opinion of the KAM was more favourable:

*Our main contact here is [the KAM]. He is listening to his customer for sure. Maybe not always proposing new trends and... to me, it is quite reactive. I would prefer somebody who brings me: “This thing is new, this is a new trend, you should take a look at this”. So he is quite reactive and **I would prefer someone more proactive. But we have a good relationship** so when I call him he calls back to do his follow-ups. So this is fine. (Customer, NA)*

The main issue of this customer was that they felt Delta was not seeking solutions proactively for their problems and that they as a customer were initiating the plans and procedures to fix the issues they had post-implementation: “*It's me that needs to push them and question them and make them tell me solutions.*” Later on in the conversation it also became evident that while Delta had undertaken some steps to rectify the issue, the customer was not kept aware of what was being done: “*And once it [the problem] was recognised by them we knew that they were addressing them but information was not coming back to us. You know, when you don't get information as human beings you want information, so we said: “They don't care about us, they are not working to resolve our issues. We are not their priority,” so pressure goes up.*” Consequently, the customer felt ignored: *This is my point here, this feeling... because I know Delta says they value customers and this is their speech, but through this project I did not feel that, sorry, but I didn't feel it. **I felt it was a small project and they were busy with other stuff.***”

The customer's main criticism is aimed towards the company level and the project, but their use of similar language in terms of proposing things and being proactive when talking also about the KAM implies that while the relationship has not suffered directly, these are the kinds of things the customer will now pay attention to and expect to be in order. There is therefore a separation between the KAM and the company, and one relationship can be leveraged to support the other.

In terms of value, the traditional goods-logic view on value is that the company creates value and the customer destroys it when they use or “use up” the product. Service logic turns this view around in that customer creates the value and company generates value activities to support them, sometimes failing in them leading to value destruction. The customer perspective in this study implies that there is a more complicated relationship between value creation and value destruction. The customer creates the value in a relationship with the company either on a personal level (through discussions or interactions) or at the company level (through engagement such as trusting the brand or wanting to work with a leader in the industry). However, value can be destroyed or diminished in these relationships by failing to live up to expectations, or in the company internal relationships as processes.

Where the customers expressed dissatisfaction or room for improvement were in the focus on firefighting instead of long-term strategic improvement, the time it takes to get responses or requests actioned, slow knowledge transfers, or lack of proactivity. Thus, the customer perspective that emerges from the interviews is that customers operate in their day-to-day work with their contact people with routines and processes, and value is being created as a certain level of expectations is set. However, the value experience is constantly being adjusted as the processes progress. Value can effectively disappear in the processes for example as the customer expects a delivery, then is told that it will be delayed, then has to contact the KAM to find out where it is, and finally receives the delivery after many communications, emails and headache.

However, the same process with its delays and complications can be experienced very differently if the vendor keeps the customer updated and involved and supports the process level with the personal relationship. Thus, in line with Makkonen and Olkkonen (2017), it seems that value co-creation and value no-creation operate in multiple levels, but in addition the results here suggest that from the customer’s perspective, those levels interact. Ideally, customer’s value creation would be supported on every level with excellent service quality, but no-creation on one level can be rectified with enhanced efforts in another.

An easy example of this would be a restaurant experience. When eating in a restaurant, one expects the food to arrive within a reasonable time. Having to wait longer than expected for the food preparation and serving process effectively destroys the pleasure of the experience, but a personable waiter (maybe pitching in a free dessert) can be a saving grace and explain what is happening so the customer will not mind the wait. In a B2B relationship there are multiple interactions over a period of time but a similar logic applies in that processual

inefficiencies can be overcome or be forgiven through a customer-oriented mindset that may not restore the original value expectation but creates an experience where value in different combinations can still be experienced.

5.7.2 KAM Perspective

From a KAM perspective, customers are their orchard and the relationships are the seeds and saplings they nurture. Across the line, KAMs interviewed identified as sales people first and foremost, with the main aim in helping and supporting the customer to keep the relationship flourishing and consequently to meet their sales targets and, while not mentioned out loud, their own bonus and reward systems. In reality though, much of their time was spent directed inwards dealing with company processes to make sure queries and orders were being handled.

A vital part of the customer relationships is therefore the ability to get things done internally. This is where having social capital can make the difference between speeding up an urgent process or failing to advocate the customer's needs internally. The extent of one's social networks is therefore directly important for the job but also a legitimising factor, showing that a place in the company is earned. As has been earlier shown, KAMs readily acknowledge the importance of both strong ties and weak ties in networks, and the whole system is largely based on people making peer connections and then using those, or else turning to their more experienced peers or managers to access their networks instead. Where there are challenges is in that people have fewer opportunities to travel and meet others as virtual networking becomes more advanced, and this limits their networks. Social capital is basically the grease that keeps the official machine running but it requires upkeep.

The networks are strongest in local level or vertically in the often-called silos. Identification with the organisation is primarily in the local level especially in the non-core areas of SA and NA. The NA respondents showed a strong preference for the local organisation: *“Generally I work with North America and they are there ones internally who are working with Finland.”* And this was noted by the HQ: *“It sometimes feels that for a certain part of our North-American people it's a little awkward that we are a Finnish-led company.”* Conversely, the SA respondents identified with the local organisation because it was felt to be something of an underdog in the big company structure and there was a lot of ambition to make the operation grow and gain legitimacy. At the same time, being a part of a big, internationally recognised company also awarded legitimacy: *“Delta is well known for being a very good company in terms of technology quality service. This we are trying to keep and maintain and also develop, especially here*

in [SA] locally. And we have had very good sales results that show what we have been doing here in this unit lately.”

Vertical identification is not explicitly discussed by the KAMs and it becomes more evident in what is not being said. Because Delta is such a big company, silos can be a support mechanism: They offer familiar pathways that make the company understandable. Many of the respondents hoped for organisational charts or more information in relation to products on websites to figure out who to contact and how do people connect to each other. Under such circumstances, sticking to the paths you know, contacting the people you know can help you, is likely to influence your choice of information source and the kinds of tasks you are willing to undertake.

On a more organisational level, KAMs and local staff did not overtly exhibit signs of power struggles with HQ. This might be due to the nature of industry and the way expertise is centralised in the company. HQ attention follows the money, so expertise is allocated based on business need and otherwise in first-come-first-served principle. However, money is found where people are trained and supported to dig for it, and in these terms HQ attention and the level of advice and expert help the local staff gets can significantly influence how they structure together the kind of deals that merit resources. Therefore, the subsidiary – HQ relationship facets become visible when looked through a prism of HQ support.

In here, too, there are regional differences in the responses. The focus in SA is currently very much in building capabilities, critical mass and presence. In short, the SA operations seem to build legitimacy and are negotiating to get attention by highlighting all the good work they are doing and the growing potential of the area. Conversely, NA are pulling together and asserting legitimacy by producing results and expecting reciprocity.

EMEA is the home base of Delta operations traditionally, and therefore holds a special position. In addition, European countries do not historically exemplify a feeling of unity that would make for strong regional cohesion. Thus the results are not comparative, but in general the EMEA interviews did not show any appeals to legitimacy and rather relied on centrality in networks. Being close to the hub and due to short distances and long history, the EMEA networks appeared quite robust and support could be accessed through them.

Controlling resources did not really rise in any of the interviews, or only as a side issue to legitimacy. As has been discussed in the literature review in Chapter 2, knowledge hoarding is rarely done to get power as it is easily counterproductive. The idea of what kind of knowledge is valuable and powerful has also changed, as

stated by a HQ respondent: “[An old manager] always talked about how expertise in the 80’s was about how much information you had on your own hard drive and your own folders and wherever, and how much of it you could keep to yourself. Coming to the 2000’s this definition of expertise somersaulted in that these days it’s more about **how you can make the team, the regional organisation, and the key people to work together with you.** That’s how experts these days get the best results.”

In line with this statement, there was no indication that local staff would in any way find controlling knowledge about a customer to their advantage and were rather focused on sharing customer knowledge and making connections between customer and experts in order to secure the best results through people’s personal engagement. As the company is aware that servitisation requires a major change in the mind-set of the local people to start selling solutions and seeking knowledge from multiple levels of the organisation, a key resource will be having the competent people take this on and be able to share the knowledge.

The servitisation initiative has not yet fully penetrated to the regional level because many of the systems and tools that are implemented as a part of it have not yet been made public. Currently servitisation is largely seen in the level of abstraction or philosophy. The visible form of it is in the added responsibilities of the KAM and the future promise of service products. However, as the servitisation initiative proceeds, it will be more and more important to have people capable of building solutions with networks as wide as they are deep and with a fairly good level of knowledge in multiple areas.

As such, a pertinent question is whether the regional organisations are needed at all. If servitisation proceeds to the structural level, would an expertise structure that connects directly with KAM level be more flexible for their needs than a regional one? Especially as servitisation will necessarily coincide or integrate with a greater degree of digitalisation, allowing for remote connections and diagnostics that will remove at least some instances where global expertise is needed on site.

From the KAM perspective, it is evident that a regional (here: country or larger region) organisation is felt to be supportive and enables identification. From the admin perspective, regional organisation allows for targeting and measurement, and by all accounts Delta is traditionally very focused on tracking progress through multiple measures. It is not within the scope of this study to start suggesting any structural changes for the company but the aim is rather to illustrate how structural implications in the subsidiary – HQ relationship are multi-layered and servitisation can have consequences that up-end both the micro and meso levels.

5.7.3 HQ Perspective

Finally, the HQ also looks at the situation from its own perspective and decisions are made and resources allocated based on their best understanding of the situation. The key issue to forming the best understanding is that only a limited number of HQ staff have direct contacts with customers and must source their information from their networks. Social capital is therefore equally important for HQ personnel as well, and people recognise the need to make their own contacts to make sure their input is valuable and on point: *“The kind of natural contact to sales, that’s missing. So you have to work with regional marketing through your own networks. It’s the kind of recognised issue that we have tried to change over the years.”*

Because of the matrix organisation and lack of direct management lines, implementation of HQ plans and actions can be challenging. This is another aspect, where social capital plays a pivotal role: *“If you want to get you have to give. It kind of goes from there that next week when we go to [a region], there are two guys that you must have worked with before and **have a good relationship and they’ll help you out.** Of course it helps that I’m taking a bottle of Finnish liqueur with me, that’s how it goes.”* HQ staff therefore operate through the local people and rather than authority, what is required is the skill to work together, provide valuable input and get networks aligned to help you.

Regarding the servitisation initiative, there seems to be a marked separation between the respondents in the Service group and those involved in other areas of the business. The level of commitment to the initiative and understanding of its scope and aims were understandably higher among the people who have been instrumental in getting the initiative off the ground. Among some of the respondents with duties in specific product categories, the initiative did not seem particularly relevant or at least not relevant yet.

Personally for me [the servitisation initiative] doesn’t really show because I don’t take part in specs and stuff like that. As of yet these systems haven’t really changed much, unless some of these marketing systems are a part of it. Those have come but I don’t know if they are specifically a part of that. Ultimately [the initiative] shows in that IT systems will get changed. (HQ)

We discussed [the servitisation initiative] and what I have to say is that I’ve worked in this field for 30 years and I’m not entirely convinced what the right thing here is, like how far it should be taken. And what’s the right concept so the customer is really satisfied. (...) If you put all the consumables in it and one guy sells all of it, I don’t know if we lose focus and competitive advantage. If the guys know what they’re doing. (HQ)

Let's say it's in its early stages, this whole concept. So far, and probably in the future as well, my products will be sold in separate transactions. (HQ)

They [presenters of a new customer interface] were like: "But we're going to the Industrial Internet now." Let's go then. But we could use a little bit of common sense here as well. (HQ)

We are still pretty new at this whole co-operation with other departments. Although it's been talked about a lot, in practice we haven't seen much of it. (HQ)

Thus even the HQ actors have conflicting views and understanding of what is changing and when and how it will have an impact on their work. As the literature review in Chapter 3 discusses, servitisation can have the consequence of cannibalising existing products, but even the respondents most ardently advocating for servitisation view the initiative as an effort to boost existing product sales. The growth can come more from long-term contracts and improved customer relationships, and the change may mean upheavals in the structures and processes of the organisation. From the level of the business model, Delta is at least at the moment unlikely to become suddenly product agnostic or expand in to financing customer environments. The HQ perspective reflects the desire to maintain a strong position with product and R&D excellence, with services as the enabling factors ensuring the processes are geared at both doing the right things and doing things right.

6 SUMMARY AND CONCLUSIONS

In this chapter I will draw a summary of the main findings of the study and discuss what they mean in the wider context of organisations. I will also state the theoretical contributions of this work as well as the managerial implications for businesses that are interested in servitisation. As in all works, there are some limitations to this study and I will state those along with other critical remarks which will hopefully serve as a springboard for further investigation along with my suggestions for future studies based on the findings here.

6.1 Summary of the Main Findings

Critical realism aims to give a plausible explanation for why and how events happen based on the underlying structures and mechanisms that are activated in unique combinations. The assumption is that there is a reality that exists beyond human understanding of it, but the socially structured framework in which we operate as people shapes our actions and therefore influences the nature of reality. Thus, we can say that a service business model exists, but the actors' belief of what is normative or valued within the business model shapes how it is acted upon. Furthermore, the ways in which people act in the various relationships that influence the business model ultimately create the combined effect of whether or not the customer experiences value.

Servitisation is the transformative period and as such provides a rich arena for study. When things are in flux, the actors have a conception of what has been done before and an expectation of what will happen in the future, thus creating expectations, hopes, fears and a sense of uncertainty. The aim of this study is to answer the prime research question: *How is value created in servitisation through the knowledge absorption process of an MNC in customer, subsidiary, and HQ relationships?* And the following sub-questions:

1. How does value creation in customer – KAM relationships affect servitisation in the subsidiary – HQ relationship?
2. How do context-bound actor interpretations of value and service influence servitisation?
3. What structures and mechanisms influence the knowledge absorption process in servitisation?

To start from the sub-questions, in the hope that answering them will provide a holistic answer to the main problem, the first sub-question looks at the micro-level, personal relationship between the customer and the KAM and how can that affect the servitisation of the company. This effect is not studied here in terms of big, disruptive innovations that can change the company through a single idea. While those undoubtedly occur, they are few and far between. What I find more interesting in the day-to-day business operations are the recurring interactions and how influential the actors perceive them to be.

For the customers the important thing is to receive quality service. What quality is in service depends on the person receiving it and how they feel about it, but the aim is to adapt the service experience instantly to the customer's needs so that the customer is positive about the experience as a whole (Singh & Marinova 2013). As one customer puts it: *“Service quality is quality in all the different levels of service. It's support; I think support is very important in service, to be proactive.”* The word proactive has occurred many times in this study and it features prominently in the raw data. It implies that the customers want not just what they asked for but something more; something that shows that the vendor is engaged and involved in the betterment of their business and leaves them on some level wiser, more knowledgeable, or better equipped to succeed.

While the findings indicate that it is the frontlines employees who are instrumental in providing the support, service innovations have mostly been studied in the remit of R&D personnel (Karlsson & Skålen 2015). Yet KAMs are in a key position, as their position puts them in direct contact with the customer and affords them the expert knowledge to engage with back office (Åkesson et al. 2016). Thus, the word proactive is tied with expertise. The vendor is expected to possess superior knowledge and capabilities and thus have the responsibility to find ways to help. *“They are the experts in whatever field they are providing information on, so I'm relying on them to give me the best solution to the problem. Not lay out different options and say: “Hey, go pick the one that best suits you!” They need to be with us, helping us make good decisions for our equipment and our mill operation.”* Yet the responsibility is not squarely on the shoulders of the vendor but it takes place in a co-operation: *“For [the KAM] to be successful I'm going to support him, and for Delta to be successful they are going to support us”*.

Therefore, from the customer perspective the KAM is there to advocate on their behalf, to get the best resources, the best experts, and the best brain power to put together personalised solutions. What they want is the support to decide what the right way to go is, and then realise the steps in getting to a state of improved operational efficiency. Throughout this process they are communicating with the

KAM, with the other maintenance and delivery personnel on site or through email, and the experts who arrive to consult and advise.

The phenomenon of multiple interactive partners is familiar from project business, where intensive periods of project work involving different parties are followed by business-as-usual, sometimes referred to as the 'sleeping phase' (Artto, Valtakoski & Kärki 2015). Diversity in the relationship intensity or discontinuity can lead to erosion of trust or commitment (Hadjikhani, Lindh & Thilenius 2012), but this study shows that structurally there are parallel mechanisms: the KAM interaction, the expert organisation, and the operational organisation. All of these are factors in the customer relationship even though they may not have a formal role or position. They are what the customer is counting on to provide the service and the avenues for the customer need to be both understood and responded to. Therefore, this study adds to the literature on servitisation from a relationship view by showing that discontinuity can occur due to breaks on different mechanisms.

The servitisation initiative is transforming all these structures, but some of them more formally than others. For example, changes in global spare part management are aimed at operational efficiency and customer satisfaction through quick responses. This is done in an effort to carry out the existing processes better, not necessarily to transform anything fundamental in the mind-set of the company. More subtle is the KAM role, which has received more attention and gradually the KAMs have taken on a more pivotal position where communications go through them and they act as the hub for everything related to the customer. However, the expertise structure seems the most elusive one.

In strategic customer relationships, organising "cross-functional, cross-divisional and cross-boundary relationships around customer value" can be a primary source of competitive advantage (Piercy 2009: 857). In order to align the value expectation of customers with the reality of execution, integration in sales and operations is required (Cooper & Budd 2007). Applying diverse strengths across the organisation achieves breadth for the solution (Wind 2005) but in a subsidiary – HQ setting operational resources can be geographically spread. In the case setting of this study, the local staff have adjusted to operating with an expert structure where resources are scarce and deep knowledge is focused. In order to get the desired resources, it is wise to book specialists' time months in advance. To find information, it is recommended to augment formal channels with informal relationships to identify the right people for help and to attract their attention. Different kinds of methods were pointed out by the KAMs whereby they tried to facilitate speedy response and attention not just for one message but to establish communication routes in the future. These ranged from meeting people and

networking with them to subtler ways such as drafting emails in a clear manner, only flagging truly urgent matters as urgent so as not to desensitise recipients to the word, or turning to authority and copying managers on emails.

On the HQ side the expert structure is also recognised as an issue. People are constantly traveling and their availability is restricted by the physical limitations of geography. Specialised knowledge also makes it more difficult to put together solutions because it requires contacting many different people, who are all equally busy. A two-prong approach to expertise involves releasing current availability with remote connections and digitalisation, and fostering a new kind of breed of specialists as solutions builders with the ability to connect various pieces of equipment and services together to a solution. This is in line with Wind's (2005: 863) call for managers with "a broader scope of thinking and action", but enhancing it with an understanding of the location-specific organisational context.

The second sub-question looks at actor interpretations of service and value throughout the knowledge absorption process and through their impact on servitisation seeks to understand also why the structures and mechanisms of servitisation may not lead to value co-creation in the customer relationships. Throughout the findings I have discussed potential issues and barriers at all stages of the knowledge absorption process. These can be failures in the processes such that the structures are simply underlining the issue, but what the actors do with them fails to reach a desired objective. For example, cultural differences can be positive, negative or neutral: it is up to the actors to choose how they operate in a multicultural environment.

The alignment of service development processes with service strategies is still an under researched area (Burton et al. 2017) and service innovation often takes lower priority in innovation literature to products and business activities (Carlborg, Kindström & Kowalkowski 2014). Yet understanding human involvement in processes is important because customer solutions require interconnected service bundles that the customer experiences as a suitable fit for a need (Ordanini, Parasuraman & Rubera 2014). Thus, processual servitisation or new service development frameworks such as Kindström and Kowalkowski's (2009) four stages from market sensing, development, and sales to delivery are augmented by understanding not only the customer as an active relationship-oriented actor, but the different company internal actors as stakeholders with viewpoints and agendas. This influences stages of the process that the customer is not directly privy to, but are also not directly mandated by management. Diverse viewpoints go into making solutions bundles based on the communicated and interpreted customer need.

It is also possible for the structures themselves to act as barriers. For example, the structure of business units operating in silos is nearly uniformly felt as a barrier for solutions business, because it limits information seeking behaviour within familiar pathways and prevents cross-pollination of ideas and information. Also the structure of how experts operate, which is largely due to a lack of the kind of high-functioning people with specialist knowledge and experience in the industry available in the market, has created a system where local actors compete for expert attention. Customers' expectations are managed to understand that resources are limited and they generally accept that this is the nature of the industry. However, while actors adjust to the situation, it is debatable whether the experts' time is utilised to maximum advantage or whether this kind of competitive setting is creating a halo-effect around the experts that makes them sought after even in cases where other recourse would be possible.

The most clearly visible occasions for a failure to create customer value is when the customer is expressing specific needs and these are not directly met. These could include problems in deliveries or not realising promised savings or efficiencies. The value potential exists in the relationship and it creates a value expectation, and yet the organisational structures and processes dilute the experience so that ultimately, without any single part necessarily failing spectacularly, the customer's total experience is that no value was gained and the experience was frustrating, time-consuming, or unpleasant. Operational efficiency programmes can address systematic problems in value no-creation, but actor interpretations are also useful in assessing gaps in expectations.

While research shows that gathering information from customers can result in greater service performance (Carbonell & Rodriguez-Escudero 2014), more research is required in understanding how interaction and discussions between parties shape their service expectations (Lundkvist & Yaklef 2004) and the context in which servitisation occurs. Servitisation, after all, aims at a higher level of meeting the customer's needs than those expressly stated. In order to be proactive and provide improvements for operational effectiveness, the vendor must be capable of procuring information from the operative environment. This means having the right kind of people available on site, the right systems integrated with the customer IT infrastructure, and the capabilities to draw conclusions and future plans from the information. Thus, the structures for actors are supported with the digital platforms that they can use, and lack of either or imbalance between them is likely to cause a failure to offer proactive support to the customer.

Finally, the third sub-question focuses on the specific mechanisms, which have been discussed at length in Chapter 5. These include tangible mechanisms like

reporting systems or networks, intangible relationship attributes such as trust or innovation, roles actors take both personally or as an extension of the organisation as an advisor, and transformative programmes. The variety of the list represents accurately the multiplicity of events that the servitisation initiative touches upon.

What is particularly notable in the mechanisms is that they operate in the reality of what people do and how they act, and in the world of perception and meanings. While the company is changing specific ways of its business, for example mapping out services that are currently provided and cataloguing these as service products that can be offered in a standardised format, the transition is taking place at the level of the role the company wants to take in the customer's value creation activities and how it is perceived as a partner and provider.

Based on this, the revised theoretical model for this study is presented in Figure 8. The original framework has been enhanced by showing that the customer has direct relationships with the KAM personally, the subsidiary as the local level, and the company as a whole through the structure of expertise and digitalisation. While value co-creation takes place in this sphere mostly through the exchange of ideas, also value-in-use is realised through the relationship in exploitation, because value is not based on usage as much as the *reliability of continued usage*. Therefore, value-in-use encompasses the vendor operating proactively to prevent issues and to improve operational efficiency through analytics. In a B2B case separating value-in-use to customer sphere exclusively is not meaningful, because the customer and company spheres overlap through partnership.

Value in the company sphere is through the perception of what is valuable to the customer and it is affected by the knowledge transfer between the units. This is shown in Figure 8 by embedding the KAM in subsidiary context, which is in turn embedded in the company context with the servitisation mechanisms detailed in the middle. To understand the challenges of how this all works, there are barriers for every knowledge absorption phase, and finally the whole process is shown to be affected by the macro-context of culture and national forces. The KAM is placed at the very centre of the figure to represent their integral role. The KAMs showed a strong identification to the local organisation and their means of knowledge seeking and problem solving generally commence from the local level.

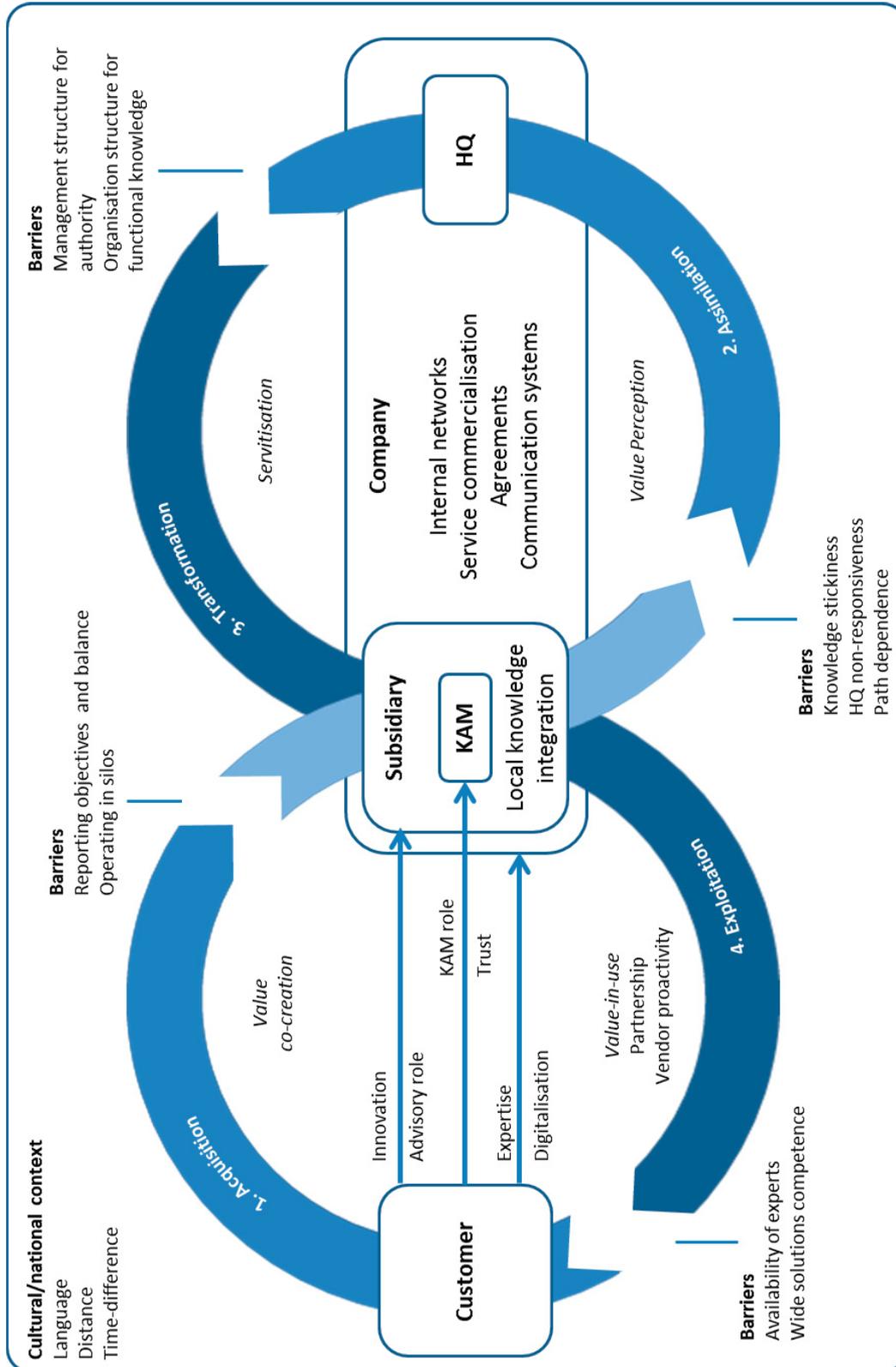


Figure 8. Revised Model of the Study

Thus, we see that there are multiple relationships at play in the knowledge absorption process and their perceptions and points of view influence the way people act in processes and how structures are formed. Servitisation does not lead to value creation by default and not all activities taken under servitisation are actually aimed at increasing services or a service mind-set. How the international network is structured does bear an impact on servitisation and the dynamics between actors are influential to generating value creating activities.

The initial theoretical assumption that customers engage with the company through their relationship with the KAM and the knowledge absorptive activities relating to value creation has been widened to include multiple layers of customer engagement that operate in parallel. Interestingly, the customer is able to hold many, sometimes contradictory, opinions about the company based on the level of connection. While the absorptive framework can be seen to operate as initially expected, it must also accommodate not only the subsidiaries' and KAM's dual identification but on some level also the customer's dual conceptualisation of the company locally and globally.

6.2 Theoretical Contributions

This study aims to make theoretical contributions to benefit the scholarly understanding of value creation in servitisation. First is the contribution to the intersection of servitisation and MNC subsidiary – HQ relationship literature. Servitisation is a literature area that has been growing at an increasing speed for the past couple of decades and can now be said to have reached its maturity with lively scholarly discussion arguing its merits and dimensions. Yet, as the literature review earlier shows, there is much in servitisation that is not understood and not even defined. In servitisation who and what is it that becomes servitised? Whose view is the lens we take to look at servitisation as a process or as a philosophy? And what is the ultimate end state of servitisation, if there is one?

Questions therefore remain and in this work I aim to problematise servitisation from the point of view of the different actors in an MNC context. While the customer's role in literature is considered crucial as the creator of value, servitisation requires that the organisational channels of value creation are understood from a service point of view (Bustinza et al. 2015) and the interaction of value and exchange reconceptualised (Green, Davies & Ng 2017). I argue that the customer relationship has a direct influencing role within the company through actor engagement. Knowledge about what customer needs and wants are gathered through interactions and people's behaviour is informed by their

knowledge (Gebauer et al. 2016), which then has a ripple effect across the network. Not much research has been carried out that would connect the relationships between subsidiaries and HQ from international business literature to the servitisation change, which ultimately take place in the same structures and processes.

Thus, this work contributes to the understanding of an MNC as a knowledge bearing entity where servitisation becomes subject to the existing mechanisms and local actors must try to gain legitimacy or use their power base and networks to seek HQ resources to respond to customer needs. At the same time servitisation transcends those mechanisms by building new ways of connecting actors through digital means or by bringing about structural changes that streamline access to resources, providing a new view on the traditional subsidiary – HQ relationship.

In terms of value, this work contributes to our understanding of value creation in international customer relationships. Ramaswamy (2011) argues that value derives from human experiences, which arise from interactions. Interactions therefore provide a context to value creation, which can be managed and configured in different ways (Benson-Rea, Brodie & Sima 2013). Furthermore, the interaction context is influenced by the capabilities of actors (Berghman, Matthyssens & Vandenbempt 2012; Beverland 2012), including actors' ability to manage the networks in which they operate (Corsaro et al. 2012). From this we can postulate that value creation is a phenomenon that can be influenced by the actors themselves and the management structures and mechanisms under which they operate. Consequently, this study finds that value-in-use in the context of a B2B manufacturing company is not occurring solely in the customer sphere but is rather a relationship phenomenon. The analysis of customer data shows that customers do not experience value from using machines or receiving service but from the future expectation of operational improvement enhanced by the vendor partnership.

However, value creation is not a default outcome of servitisation and the opposite may be true on some occasions. While value creation occurs in all interactions of the customer relationship (Lindgreen et al. 2012) the findings here show that even when value is experienced in the relationship, the organisational processes may effectively eliminate it. Thus, value co-creation does not necessarily lead to customer value if the organisational processes and the underlying social structures and mechanisms of the company do not support knowledge absorption throughout all the four phases of absorptive capacity.

Another theoretical contribution of this work is to the KBV as the main theory applied here by way of the conceptualisation of absorptive capacity. The initial

theoretical framework of the study presents absorptive capacity as a loop that connects the customer, the KAM in the subsidiary, and the HQ. The framework builds on the earlier conceptualisations of absorptive capacity but reinforces them in showing that there are different actors who contribute to the different phases. This conceptualisation reinforces the contemporary view of subsidiaries as knowledge creators in an integrated network (Achcaoucaou, Miravittles & León-Darder 2014), subject to different relationship dynamics at various parts of the network and phases of the process. It also emphasises the dual role the subsidiary and subsidiary actors take in operating semi-autonomously in networks (Wang, Liu & Li 2009; Gammelgaard et al. 2012), which means that absorptive capacity, as shown in this study, is not one linear process between company external and internal environment as generally assumed but instead it is influenced by company internal dynamics.

The evidence suggests that this is the case in the context studied here. There is a marked difference between the viewpoints on the process when the activities happen on the micro-level and actors are forming relationships, and in the meso-level where transformative programmes are being initiated. Furthermore, the study shows that absorptive capacity functions as a process between people, between structures, and between people and structures, but they are subject to different dynamics. The KBV is generally interpreted as a view where knowledge is used as a resource without any greater definition of who uses it or for what. This study shows through absorptive capacity that the change potential of knowledge is subject to the dynamics between the actors exchanging it.

Even though customer value and customer service are integral parts of servitisation literature, often research is done from the point of view of managers and what HQ top management believes is important for customers (Luoto, Brax & Kohtamäki 2016). In this study I wanted to make a contribution to the literature by letting the customers express their own views on what provides them value and even what the words value and service mean to them. I also did not want to limit this view to the customers but by taking seven embedded cases and treating them as dyads, this study shows that different actors' expectations and assumptions about the process influence their experience of it. Table 17 below summarises the main findings in relation to the aims of this research.

Table 17. Contributions in Relation to Research Questions

Research Question	Key Findings	Theoretical Contribution
How does value creation in customer – KAM relationships affect servitisation in the subsidiary – HQ relationship?	<ol style="list-style-type: none"> 1. Customers define the role they want the vendor to take, including the KAM role and the advisory role of the whole expert company. 2. Value-in-use is a relationship phenomenon in the context of a B2B expert company, because value is realised more from the future expectation of reliability and risk mitigation than the current production. Proactivity for future improvements requires servitisation to make structural changes in expert networks and digitalisation. 	<p>Enhanced understanding of the roles different actors in the MNC network take in value creation and how those are assigned.</p> <p>Contribution to subsidiary-HQ literature in showing the structural implications of value creation.</p>
How do context-bound actor interpretations of value and service influence servitisation?	<ol style="list-style-type: none"> 1. An alignment between the value activities in personal relationships and organisational structures is required or servitisation will not lead to value. 2. If servitisation does not change the underlying social structures and communication channels, people will continue to transfer knowledge and request help based on their established patterns, leading to path-dependence. 	<p>Mechanisms for understanding why servitisation paradox may occur and what relationship factors contribute to it.</p>
What structures and mechanisms influence the knowledge absorption process in servitisation?	<ol style="list-style-type: none"> 1. Barriers were found in each phase of the absorptive capacity process, showing that different dynamics are at play depending on actor involvement, relationship, and stage of process. 2. Customer connects with the KAM personally, the local subsidiary as a unit and the company as a whole, and these connections carry different expectations. 3. Company internal structures are based on informal networks, which are influenced by the formal structures and projects the company undertakes to enhance servitisation. 	<p>Absorptive capacity can be used as a more precise tool when accounting for the differences in the phases.</p> <p>Servitisation understood from different perspectives.</p> <p>The interplay between existing networks and servitisation projects made visible.</p>

6.3 Managerial Implications

This work offers also guidance and advice for business practitioners. Even though the study is limited to one case company and due to its qualitative nature is not generalisable to the whole population of international organisations looking to servitise their operations, it does still offer some important learning points.

The first issue is that companies thinking about servitisation should consider what the ultimate goals of their servitisation initiative are: What does being service-oriented mean to their company and to what degree are they looking to change the mind-set and become more efficient at what they are currently doing. Because there are so many ways servitisation can be understood in the company, ensuring a shared understanding of common terms for value and service and the aims of the initiative is important.

This study can also help managers evaluate structural and interpersonal interplay for their knowledge acquisition and assimilation tactics. Many companies acknowledge that getting customer information is crucial for making decisions, but it can be difficult to source it. This study provides a framework that managers can use to consider whether the issues are in the local level in getting the knowledge to the company, or in the relationship between the local staff and HQ so that the knowledge does not get moved to the right people. In both cases, this study presents factors that influence the knowledge transfer processes and can be used by other companies to evaluate their own operations against.

Finally, this study gives managers an understanding of how different actors in the company are subject to different forces and that their expectations and experiences of the company and what it is to work for the company are different. Servitisation initiatives may be conceptualised in highly diverse manners depending on geographic locations, subsidiary age or stage of maturity, market conditions or other external or internal factors that affect people's lived experiences.

6.4 Limitations

No study is all studies and as such, all are limited by their scope and structure. This study is focused on going deeply into the internal workings and customer relationships of one case company and is limited to that. I do not attempt to make generalisations about all companies, though I venture to suggest that most manufacturing companies in heavy machinery are likely to face similar issues and struggle with being closer to customers.

Another limitation of the work is the time period within which it was carried out. Servitisation is an on-going project and I entered it at a time when it was still in its early stages. Though significant work had already been done, many of the respondents were not fully aware how the initiative would influence them or had talked about it much to their customers. A longitudinal study mapping the transition as it happens would have also captured the change in the processes, which here are considered in the form they are in the specific time I entered the case company.

This study includes in the scope the case company and seven embedded customer cases in terms of the customer representative and the KAM they work with in direct contact. In some cases, the KAM recommended other actors that could complement the study in the local level and they were included in the interviews. However, a limiting boundary was drawn in not including an analysis between greater networks. The whole company structure consists of local actors with country level operations, regional operations, and global operations. Furthermore, subsidiaries have also lateral connections with each other, as well as with a complex network of suppliers, agents, and other third-party partners. I decided not to include these in the scope of the study as this is an exploratory study to a topic that still requires further research. The simplified framework used here provides a starting point for understanding the international dynamics of knowledge transfer and value creation in servitisation, but mapping the whole network of a multinational company is at the current time out of scope.

However, within the focus on customer dyads, it can be argued that restricting the number of dyads to seven is a limitation to drawing generalisations inside an MNC with thousands of customers and global operations. Why seven? The original target for embedded cases was ten, three of which were cancelled. However, why ten, for that matter? The reasoning in this study was that in each area a minimum of two embedded cases would be needed to contrast the kinds of issues that come up. I am using the regional names SA, NA and EMEA as identifiers but by no means am trying to suggest that two (or three, or ten) interviews could in any way encompass all the opinions of an entire continent. Rather, two cases give more fruitful data and a chance to discuss the data in relations to each other. Three cases were selected just in case of cancellations and as those occurred, I reviewed whether the data was sufficient to move forward case-by-case.

In terms of analysis, a researcher should always be critical towards their own process and question the possibility that what they argue as a finding is not supported by data. In the context of this study this means questioning the use of the framework and how much it has guided the final results. It is for this reason

that I have taken extra care to double code the transcript data against both the framework and the natural categories, in an effort to see if there is correspondence. This was found to be the case, though a revised model is offered to show that an additional dimension is needed to understand the customer's relationship with the company as a whole. I would further argue that the contribution of this work is not to map out a step-wise absorptive capacity or servitisation process but rather to highlight the different dynamics that occur in different relationship, wherever and whenever that might be.

6.5 Suggestions for Future Research

The process of writing this dissertation has illuminated how much of the phenomenon of servitisation in the international context is still unaccounted for. To deepen this work further, longitudinal research would be a natural next step to see how the process takes shape in the customer and subsidiary spheres, and how this process will maybe change the HQ aims of where they want to take it. While much of the company is still product-oriented, the future developments will show how a service-oriented mind-set will take hold in the company and if this will have an impact on how business is done in the future.

To support the findings of this research in specific areas, the transformative projects of the company must be raised on a platform of their own. Servitisation on a general level has received much attention in literature, but its constituent parts such as digitalisation, commercialisation and a move towards agreement-based business are much less well understood. Future studies can use the framework and findings provided here to evaluate the aforementioned factors as micro-level activities and meso-level projects. For example commercialisation can be evaluated not just on the basis of how many service units will ultimately be sold but how do sales people conceptualise them during the sales process, or do customers view them as the essential of the offer or as value add-ons.

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APPENDICES

Appendix 1: Interview Questions – Customer

<p>What value does working with Delta bring to your company?</p> <ul style="list-style-type: none"> • How can Delta improve the way you do business? • In which processes can Delta take part?
<p>What does service mean to you?</p> <ul style="list-style-type: none"> • What kinds of elements does it include? • What is achieved by it? • How is it carried out in practice?
<p>What is service quality to you?</p>
<p>What do you expect from working with Delta?</p>
<p>What do you discuss in your meetings with Delta representatives?</p> <ul style="list-style-type: none"> • What would a perfect meeting with Delta look like? • What are the issues you want to discuss? • What are the problems you would want solutions for?
<p>Describe your experience with Delta</p> <ul style="list-style-type: none"> • How has co-operation developed? • What kinds of challenges have you faced? • How have they been solved?
<p>Has there been a situation where you have presented Delta with a problem in your business or process and asked for a suitable solution for it? If yes, please describe the situation.</p> <ul style="list-style-type: none"> • What service were you offered? • How was the solution planned? • Did the solution fit your business and organisation? • What support did you get? • Was the problem solved? • Did the solution meet your expectations?
<p>How could Delta better support you?</p>
<p>If you need a new service or changes in the way things are currently done, how does delta respond to your needs?</p> <ul style="list-style-type: none"> • How is change managed? • What challenges are faced? • What support do you get? • What kinds of things take your time or resources?
<p>Please describe your service experience with Delta</p> <ul style="list-style-type: none"> • What do you remember best? • What has benefitted you the most? • What more could Delta offer to you?

Appendix 2: Interview Questions – KAM and Subsidiary

<p>How do you define value?</p> <ul style="list-style-type: none"> • What value does a customer get when dealing with Delta? • How can Delta improve or develop the customer's business?
How do you define Service?
How do you define Service Quality?
<p>Describe a typical customer encounter</p> <ul style="list-style-type: none"> • What are your customers interested in? • What do your customers expect from Delta? • How do you get your customers interested in services (if not already)? • What would a perfect customer meeting look like? • How do you describe Delta's services to customers?
<p>Describe a customer relationship where services have been developed</p> <ul style="list-style-type: none"> • What services have been offered to the customer and how have they responded to them? • What customer challenges have the services responded to? • Who initiated service development?
<p>What resources, skills and knowledge do you need from Delta so you can offer your customer the best possible service?</p> <ul style="list-style-type: none"> • What practical consequences does offering services have for your job? • What does it mean to you that Delta is a service provider? How does it show in the way you carry out your work? • What aspects of the sales/service process take most of your time? • What kinds of things take up time that could be better used, for example working with the customer?
<p>Who do you tell about the needs and wishes of your customer?</p> <ul style="list-style-type: none"> • In what ways and on what occasions do your managers, colleagues and staff in headquarters find out about what your customer needs? • Do the headquarters understand your customer and the challenges your customer faces? How about business in your country or area?
<p>Describe a situation when you have needed additional support from Delta to offer better service for your customer.</p> <ul style="list-style-type: none"> • Who did you contact? • How was your situation responded to? • Did you get what you needed? Were you satisfied? • Did you get the required support quickly and efficiently? • Was the customer satisfied?
Have you been in a situation where you have been able to exceed customer expectations? Describe.
Have you been in a situation where Delta has been unable to meet customer expectations or solve the customer's problems? Describe.
<p>What is difficult or challenging in your job?</p> <ul style="list-style-type: none"> • What could be done better? • What value would this provide to the customer?

Appendix 3: Interview Questions – HQ

<p>Please describe your job and its main responsibilities</p> <ul style="list-style-type: none"> • Who are your main contacts in the sales operation? • Who are your main contacts in the regions?
<p>How do you define value?</p> <ul style="list-style-type: none"> • How can Delta benefit a customer? • How can delta improve or develop the customer's business? • What value does a customer get when dealing with Delta?
<p>How do you define service?</p> <ul style="list-style-type: none"> • How do you define service quality?
<p>Do you engage directly with customers and in what capacity?</p>
<p>How does the servitisation initiative concept show in your work?</p>
<p>How do people contact you from the countries?</p> <ul style="list-style-type: none"> • Through what means? • What formal reporting channels are used? • What informal channels are used (phone/email/etc.)? • Do you use social media for work contacts?
<p>What kind of requests do you get?</p> <ul style="list-style-type: none"> • What are the routine jobs? • What are the service elements? • What would you consider an exceptional or out-of-the ordinary request? • Can you describe a situation when you have received a request you needed to respond to that required additional resources, support or effort?
<p>What kind of information do you get from the countries?</p> <ul style="list-style-type: none"> • Do you know the customers? • Do you feel you know the customers' needs? • Do you know how business is done in the specific country and the local requirements there? • How do you get information you need to do your work? • What kind of co-operation do you have with people you see as your key stakeholders?
<p>How does the process go from then you get a request for support?</p> <ul style="list-style-type: none"> • What are the routines and protocols? • Can you describe a situation when a KAM contacted you for support? • Who did you contact first? • How was the situation responded to? • Did the KAM get what they needed? Were they satisfied? • Did they get the required resources quickly and efficiently? • Was the customer satisfied?
<p>How do you ensure your actions are in line with the customer's requirements?</p>
<p>Can you describe a situation when you have changed the way you work based on a customer request?</p> <ul style="list-style-type: none"> • What changed in your own work, habits, processes or routines? • What changed in the way other processes worked? • Have there been any big organisational changes based on specific customer requests?

<p>Why does the organisation change?</p> <ul style="list-style-type: none"> • What drives the change? • What is the aim to be achieved from change? • How is the change carried out?
<p>How is learning from one customer case carried over to other situations?</p> <ul style="list-style-type: none"> • Can you describe a situation where some service elements have been applied in a different context? • How is information shared in the team? • How is information shared across functions? • How is information shared across countries? • What kind of formal and informal communications channels do you use?
<p>How is learning from customers used to create value to other customers?</p>
<p>How is learning from customers used within the company to improve structures and processes?</p>
<p>Can you describe a successful transformation project?</p>
<p>Can you describe an unsuccessful transformation project?</p>
<p>What kind of information and from where do you need to do your job efficiently?</p>
<p>What is difficult or challenging in your job?</p> <ul style="list-style-type: none"> • What could be done better? • What value would this provide for the customer?
<p>How are services developed?</p> <ul style="list-style-type: none"> • Where do the ideas come from? • How does customer value show in the development process and the outcome?