

**UNIVERSITY OF VAASA**  
**FACULTY OF BUSINESS STUDIES**  
**DEPARTMENT OF MARKETING**

Maija Vanhala

**INTERNATIONAL DISTRIBUTION CHANNEL STRATEGIES  
FOR SERVICE PRODUCTS:**

Case study research on Internet of Things enabled innovative B2B services

Master's Thesis in  
International Business

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**UNIVERSITY OF VAASA****Faculty of Business Studies****Author:**

Maija Vanhala

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**Name of the Supervisor:**

Peter Gabrielsson

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**ABSTRACT**

This master's thesis research examines how manufacturing companies in the high-technology industries have crafted their distribution strategies, why the decisions have been made and how the channels are evolving. The main focus of this research is to study how innovative Internet of Things enabled (remote condition monitoring) service products are distributed. The research studies the topic by relating distribution literature to three different theoretical areas, namely, value in relationships, product-technology maturity and market diversity. These approaches were chosen because of their ability to explain dynamism, longitudinal development, and transitions within the channels.

The research is a multiple case study that utilizes interviews as a main source of data. The qualitative research pursues to produce knowledge about service product distribution channels. The researcher seeks to investigate which factors affect distribution of remote condition monitoring service products and to reveal contingencies. There were four cases studied as the researcher pursued case comparison and thus, to produce generalization.

The study results suggest that the strategies are either direct or dual distribution strategies at introduction phase and then they develop into more cooperative hybrid channels or continue with dual strategy. Value in relationships have effect on dual and hybrid distribution decisions as well as type, intensity and coverage of distribution, but also relates to standardization of distribution strategy. Service product-technology maturity affects channel development related aspects and which channels can be exploited. Market diversity explains utilizing multiple channels in distribution as well as adaptation of strategy. When more markets are penetrated, adaptation pressure increases.

When this kind of a service product is sold a lot of value has to be proposed and security related aspects must be addressed in the sales situation through direct interaction. Thus, proactive and competent sales people are important factors for success.

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**KEYWORDS:** distribution channels, value in relationships, product-technology maturity, market diversity, standardization



## 1. INTRODUCTION

In this section the research will be introduced. This master's thesis examines distribution strategies for remote condition monitoring service products. The background for the topic is set by introducing different concepts that are changing the business environment and are allowing the companies to create innovative products, services and solutions. These concepts are: Internet, increasing importance of service and globalization. They will be presented in the background section in more detail. After presenting the background, the research gap, which builds the need for the study, is introduced. Based on that, the purpose of the study and research questions are described. Finally, the key concepts are explained and the structure of this research is presented.

### 1.1 Background

The basis for my research is stated by Laudon and Traver (2010: 6-4) who claim that Internet, importance of service and globalization are transforming nearly all industries. First of all, Palmatier, Stern and El-Ansary (2015: 315 – 316) argue that Internet offers major disruption to channel structures and strategies. This is considered to be critical for financial and strategic performance of most channel members in the future. There are many ways in which Internet is changing the value chains in industries (Palmatier et al. 2015: 315 – 316). Developed applications are hard to keep proprietary from new entrants (Laudon & Traver 2010: 2-39). It offers lower costs, transparent pricing and possibilities for the manufacturers to bypass distributors easier (Porter 2014). Bypassing distributors enable manufacturers to develop relationships with end-customers that were previously “owned” by intermediaries, and they can also use the relationship to gather information and creating better services (Laudon & Traver 2010: 2-41 - 2-42). Internet has its effect on industry structure in several ways; it can be seen to reduce differences and increase global competition (Porter 2014).

Second, the importance of service is claimed to increase when countries develop. According to Kotler and Keller (2012: 348) there are five levels of a product. In developed countries most of the competition happens on the augmented product level, consisting of additional features, attributes, benefits or services that help manufacturers to differentiate from competition, not on the core benefit level (Kotler & Keller 2012: 348). Levitt (1983: 82) has explained that “New competition is not between what companies produce in their

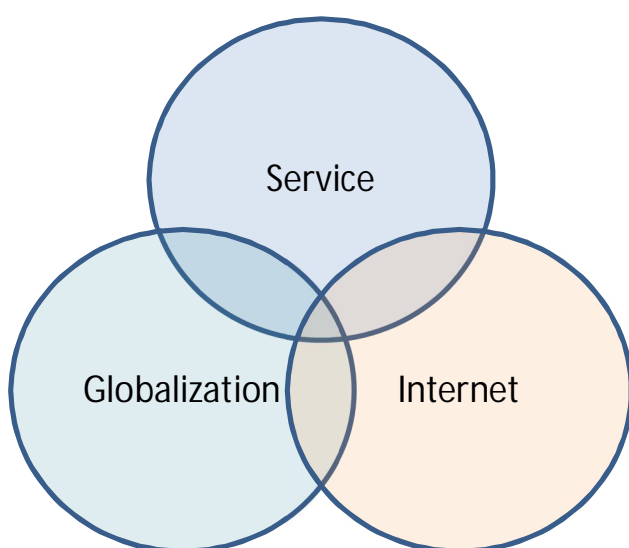
factories, but between what they add to their factory output in the form of services, advertising, customer advice, financing, delivery arrangements, warehousing, and other things that people value.” Lovelock (1999) states that supplementary services add value and offer opportunities for international strategies. This is evident especially when products are seen as complex and technologically advanced (Javalgi & Ramsey 2001). It is also said that through services the companies can gain better margins, deeper customer relationships and they are seen as sources for competitive advantage and growth (Lindberg-Repo & Dube 2014: 134). Even though, interest in services is growing, the literature is claimed to be underdeveloped in this area (Javalgi & White 2002).

Nevertheless, some academics have taken the marketing discussion to a new level by offering ‘service logic’ or ‘service-dominant logic’ for businesses to move towards service perspective. They argue that the value is created *by* the customers and the service is a resource input that facilitates customer’s own value creation (Grönroos 2006; Vargo & Lusch 2004, 2008). This is visibly recognizable in current business environment, especially as new technologies enable companies to offer digital services where customer value creation is in a critical role (Pires, Stanton & Rita 2006). However, the companies should not pursue utilizing solely new, less expensive service channels to enable maximized value for the customer. Either complementary or supplementary relationships between variety of channel types and intensity is suggested beneficial in different studies (Frazier 1999). However, it is stated that complementary roles in value creation within channel relationships should be researched (Chung, Chatterjee & Sengupta 2012). Furthermore, Internet based channels are stated to be still under researched (Gabrielsson & Gabrielsson 2011).

Internet enables companies to develop electronic business (e-business) and electronic services (e-services), which also creates new challenges for the companies. Service process related to electronic services is considered as a highly important factor as poor functionality and responsiveness affects directly the time and effort the customers need to gain value (Gummerus 2010). Liu, Du and Tsai (2009) have acknowledged also some process-related factors, such as, usability, privacy, security and appearance. In business-to-business context companies may be concerned especially on data privacy (Jha & M.C. 2015). According to Gummerus (2010) the customers that feel insecure about electronic services must be considered especially well through publishing manufacturer’s privacy policies, providing evidence of functioning and demonstrating that the content is accurate.

Also, the content must be aligned with customer's wishes on quality and breath of information offered online (Liu et al 2009). Real-time services are a possibility to help customers create long-term value, improve productivity and enhance safety (Vitale, Giglierano & Pfoertsch 2011: 346). The acquired real-time data should be translated into true added value (Lindberg-Repo & Dube 2014: 118). Whereas, service configuration offered to customers consist of value inputs (Vargo & Lusch 2008), variety and scope of services that customers want and are willing to use (Gummerus 2010). Due to different backgrounds the customers globally have different expectations and needs for the service configuration: user training and product information, support during installation and testing, financing or transaction services (Vitale et al. 2011: 346).

As globalization increases, it has a big impact on business strategies and companies must balance between the national and international or global markets, it seems justified to take standardization and adaptation literature into consideration. Dimitrova and Rosenbloom (2010) argue that standardization versus adaptation discussion on marketing strategies have concentrated on marketing mix level, consisting of product, price, promotion and place (distribution). However, distribution decisions have not been sufficiently covered and it is claimed that distribution decisions might be most difficult to standardize or might not even be viable for standardization (Dimitrova & Rosenbloom 2010). To summarize, Internet facilitates companies' endeavors to develop new kinds of services while importance of service increases. At the same time the companies are competing in increasingly global scale, so they need to know how to distribute new innovative electronic services (e-services) in the global market place (see **Figure 1.** for summary).



**Figure 1.** Background for the thesis illustrated by three trends.

The topic is considered important as the Internet enables new global e-services. They are increasingly developed by manufacturers to create value for their customers and to generate steady stream of revenues (Javalgi & Ramsey 2001). The topic for this thesis was ignited together by the researcher and a manufacturing company selling e-services globally as a part of its service portfolio. The topic is an especially interesting research area as the remote condition monitoring service products are complex as they consist of two different components – sensors and communication technologies that are installed on a product, and software that produces the service for the customers (Dubey & Easwarapillai 2015). According to Chung et al. (2012) new forms of serving and helping customers to create value, are expected to generate benefits for the whole value chain through increased data availability and utilization. Based on previous discussion, e-services can add a lot of value for customer which needs to be considered when making distribution decisions. This study examines the phenomena related to rather limitedly researched international e-service distribution strategies.

## 1.2 Research gap

Many researchers have identified that research on multiple and Internet based distribution channels is still under researched (eg, Gabrielsson & Gabrielsson 2011). Multiple channels means either using dual channels, company-owned and external channels in parallel formation, namely, dual distribution or sharing channel functions between the manufacturer and the intermediary, called hybrid distribution (Anderson, Day & Rangan 1997). It has also been argued that more empirical studies with a longitudinal approach on channels should be conducted (Frazier 1990: 256 – 271). According to literature review there is limited research about distributing services. Furthermore, business to business (B2B) environment has gained limited attention in comparison to consumer business. Even though, it has been stated that especially B2B channels, which are complex, have diverse channel settings and relationships with multilevel effects (interfirm, interpersonal and person to firm), require further research (Sa Vinhas, Chatterjee, Dutta, Fein, Lajos, Neslin, Scheer, Ross & Wang 2010). There is a need to investigate multiple channel choice related to special context, for example, product complexity and market turbulence (Sa Vinhas et al. 2010). Thus, multiple channels (including Internet channels) are researched in B2B context, examining service product distribution strategy development.

In this study relationships are seen to affect the channel decisions due to their potential to create value. Vargo and Lusch (2008) suggest that within the channel systems there is a complex network of actors that are creating value. Chung et al. (2012) state that all of the relationships must add value to the channel network. Sa Vinhas et al. (2010) add that the actors in these channel systems should understand the dynamics and roles that each actor plays to create value. Additionally, companies' perceptions about importance of transactions compared to importance of relationships in business should be examined (Rapp, Rapp & Schillewaert 2008). Rapp et al. (2008) suggest to examine how these perceptions influence e-business implementation and value. Furthermore, Vargo and Sinhav (2015) state that Internet-based channels have a great impact on productivity, but they also have implications for vertical and horizontal conflicts, which should be further studied. This research aims to produce new knowledge on value distribution network and conflict within the channel system.

It has also been indicated that channel integration needs further research (Binder 2014: 230 – 231). Binder (2014: 5) states that only little empirical insight on consequences, contingencies, mechanisms and effectiveness of channel integration activities exists. Also, importance of vertical integration compared to importance of transactions should be studied according to Chung et al. (2012). It is further stated that understanding perceptions of value in channel integration and how channel integration can be managed efficiently should be studied (Anderson, Simester & Zettelmeyer 2010). Also, it is suggested to study more the standardization versus adaptation decisions of distribution strategies of the firms (Dimitrova & Rosenbloom 2010) as they have been neglected in previous research. Thus, special focus is in examining integration and channel standardization decisions.

There is thus room for research on multiple channel management with the focus on value in relationships as well as standardization decisions in business to business companies' context. The researcher claims that value creation within the channel relationships extends not only to multiple channel decisions, but also to types of channels, intensity and coverage decisions and standardization decisions of the marketing strategy across the markets. Furthermore, product and market characteristics are claimed to be in a crucial role for channels and their development. This topic has a valid research focus especially now that manufacturing companies in the high technology industries are starting to market their new service products in order to create value for the channel network, which creates a unique context and fertile ground for research due to limited amount of studies.



### 1.3 Purpose of the research and research questions

The purpose of this research is to contribute to the international distribution channel strategy literature by examining new, innovative service product distribution channel strategies in international business to business high technology companies' context. The study examines what kinds of international channel options are available for the manufacturing companies and why these strategies have been adopted. It seeks to examine multiple distribution decisions, types of channels, intensity and coverage as well as standardization of the distribution channel strategy across the international markets. The thesis has a special focus on value creation within relationships, product-technology maturity and market diversity related to multichannel strategies and distribution strategy development. The study seeks to describe what kind of channel strategy alternatives exist and how the channel strategies develop. It also pursues to analyze the strategies by reflecting empirical results to the theoretical approaches used in this study as well as to present a framework describing channel choice and development. To reach the purpose of the study the following research questions are set:

- (1) What kind of international distribution channel strategy alternatives are available for high-technology companies offering IoT enabled innovative service products and how they evolve?
- (2) How different factors impact selection of international distribution channel strategies of high-technology companies marketing innovative service products?

Introduction of the research gap, purpose of the thesis and the research questions leads us to discussing delimitations set for this thesis research.

### 1.4 Delimitations

To delimit the research topic and for it to be feasible for a master's thesis, the focus of this research are manufacturing companies in high-technology industries operating in international business to business environment. The chosen companies have Internet of Things enabled innovative service products. The research pursues to contribute to existing literature by examining distribution channel strategies from the manufacturers' (service providers') perspective. To be able to compare the results and find patterns in the distribution decisions companies with condition monitoring systems that are sold to new

and old products, were selected to be studied. The chosen companies have established distribution channels for the core products (products that the service products are designed for) and are selling them through multiple channels. This decision was made to study if the existing channel relationships affect distribution decisions.

This study mainly concentrates on sales, but also promotional activities are referred to. The study does not include logistics or stock keeping, but of course touches on these functions. This decision was made to keep the scope of the studied topic manageable. This study concentrates on the factors affecting international distribution channel decisions by relating value creation in channel relationships to product-technology maturity and market diversity and further adapting it to service context. The study is also examining standardization decisions of the channels between different international markets.

## 1.5 Key concepts

*Channel integration:* Mooradian et al. (2012: 311) have stated that different parts of the channel handle different value adding functions, for example, logistics, transactions or various facilitating tasks, such as promotion, service and supporting installed products. Channel integration means that these channel functions have been divided between the manufacturer and the intermediary or different parts of channel owned by manufacturer (Anderson et al. 1997). For example, a sales lead can be generated by manufacturer and the purchase made through intermediary; or sales might be done on manufacturer's website, but product is delivered by the intermediary (Tsay & Agrawal 2004).

*Core product:* Core product is used to describe the product that the company produces and for which the service product (remote condition monitoring service) is designed for and most often sold to.

*Electronic business and electronic commerce:* Transactional facilities on the Internet enable selling products, services and electronic services online (Palmatier et al. 2015: 315 – 316). Electronic commerce (e-commerce) is used to refer to outward facing activities which are fairly easy to implement. Electronic business (e-business) includes e-commerce, but also internal processes, such as production and product development (Computerworld 2015).

*End-customer:* End customer describes the end-user that has the manufacturer's core product installed in its facilities. End-customer is a company that utilizes the core products for production and is hypothesized to gain benefit of the service product.

*Intermediary:* Intermediaries are so called 'middlemen' the manufacturers may use to distribute their products and services. These are independent companies that perform certain functions on behalf of the manufacturer. The manufacturer and the intermediaries for example, Original Equipment Manufacturers (OEMs), distributors and integrators, can work in cooperation or even be competitive. (Palmatier et al. 2015: 156).

*Installed base:* Here installed base is used to describe the core products that the customers already have in their plants, factories and other locations. These products are already sold and in use at end-customer facilities.

*International distribution channels:* International distribution channels, also referred to as marketing channels, indicate how a product or a service is made available internationally from the producer to the end customer, through possible intermediaries (Palmatier et al. 2015: 156). Mooradian, Matzler and Ring (2012: 311) state that different parts of the channel handle different value adding functions. The company can have direct company-owned channels, indirect external entity owned channels or multichannel distribution consisting of either dual distribution, utilizing direct and indirect channels in non-cooperative manner or in hybrid formation with cooperation within the channel (Palmatier et al. 2015: 156). Companies must also decide type of the channels (eg, company sales force, online sales, retail stores and OEMs) and the intensity and coverage of their distribution (exclusive/intensive distribution, geographical areas).

*Internet of Things:* The concept Internet of Things (IoT) describes the devices connected to the Internet, these include sensors, mobile phones, computers, cars and motors, household appliances, for example, and they can now also be connected to each other (Forbes 2014). The devices produce, process and utilize data, which is made available in everyday situations, such as, processes in factories, logistics applications and private households. New, scalable solutions that are compatible and secure are created to support business, process data and manage complex network of interconnected devices. (Internet of Things 2015.)

*Manufacturer:* Manufacturer is used to describe the studied case companies that produce the core products that the remote condition monitoring service product is sold to and who pursue marketing of the core products and remote condition monitoring services.

*Retrofit:* Term retrofit is frequently used when describing post-installation upgrades to existing installed base. For example, installing and configuring service product to old core product.

*Service product:* In this study service product (or remote condition monitoring service) is used to further highlight the qualities of the studied services. Remote condition monitoring service is a service where customers can remotely access information of the core products the service is designed for.

*Services versus products:* There are four characteristics related to traditional services: intangibility, heterogeneity, inseparability and perishability (Lindberg-Repo & Dube 2014: 123), which means that the service is produced in interaction with the customer and it cannot be stored. Nevertheless, many international services are separable and thus exportable and also storable, which means that consumption can take place in different place than production (Erramilli & Rao 1993), for example, software on computer's hard drive. International services often include some amount of tangibility, for example, disk for software distribution (Javalgi & White 2002). Division between physical and virtual comes to the products requiring traditional distribution system and products that do not require physical distribution (Dann & Dann 2011: 162 – 163).

*System product:* In this context system products means products that consist of mixture of product elements, for example, software, hardware, services, know-how (Gabrielsson & Gabrielsson 2011). The remote condition monitoring service product consist of physical and digital features, so it is considered as a system product. When the system product is in solution stage of its product-technology life cycle, it requires special competences from the manufacturer or intermediaries, because it is needed to be installed and configured (Gabrielsson, Kirpalani & Luostarinen 2002).

*Value and value creation:* According to Grönroos and Helle (2010) value has technical, monetary and perceptual dimension. Technical dimension consists of process functioning and efficiency related aspects. Monetary dimension comprises of cost savings and business growth, and perceptual dimension relates to performance perception, trust, commitment and attraction (Grönroos & Helle 2010). Value creation means performing

actions that increase the worth of goods, services or a business and value created can be measured or perceived using the dimension mentioned above (Business dictionary 2015).

## 1.6 Structure of the thesis

The structure of the research covers following sections: introduction, literature review on distribution channels, description of research methodology, data collection and analysis, case analyses, findings and discussion as well as conclusions and recommendations. At the end, references and appendices can be viewed.

Introduction proceeds from introducing background and research gap to purpose and research questions to delimitations of the study. After that the key concepts are presented and finally the structure of the thesis. Literature review follows the introduction section. In distribution channel literature review section, literature related to distribution channel decisions is reviewed. Furthermore, emerging channels and electronic services are discussed to highlight decisions related to them. In addition, value in relationship and complementary approaches utilized in this study, namely, product-technology maturity and the market diversity related literature are presented. At the end of literature review section the framework and hypotheses for this study are presented. After that, research methodologies, data collection and analysis methods are described. The study then proceeds to analysis of four individual case studies and cross-case analysis. This is followed by findings and discussion of the results. Finally, conclusions and recommendations are given. The theoretical contribution and managerial implications are presented and limitations as well as future research directions are discussed.

## 2. DISTRIBUTION CHANNELS

In this part the key works and literature of the distribution channel related decisions are discussed and approaches and theories in which are concentrated on, are presented. The section starts with an introduction to the studied subject, building from general literature regarding distribution of goods and services to deeper insight into emerging channels and services. Value in channel relationship literature is examined throughout the literature review and it is complemented by product-technology and market diversity approaches to be able to explain dynamism, longitudinal development, and transitions within the channels. Finally, the conceptual framework and the hypotheses for the study are presented.

### 2.1 Introduction to distribution channels

Distribution channels indicate how products or services are moved from the producers to the end-customers. It is possible to distribute them directly from the manufacturer to end-customers or indirectly through intermediaries (e.g. distributors, OEMs, retailers), who perform value adding functions within the chain to distribute the good or service on behalf of the manufacturer (Mooradian et al. 2012: 311). Rosenbloom (2013) states that different parts of the channel handle different value adding functions, for example, logistics, transactions or various facilitating tasks, such as promotion, servicing and supporting installed base. Many manufacturers are also aware that often the intermediaries “own” the customers because of the value adding activities they perform (Mooradian et al. 2012: 314). Chung et al. (2012) state that the intermediaries can be important asset for the manufacturers to serve end-customers and they must create and deliver value for the customers if they are used. Especially when the market is growing there is a stronger trend for manufacturer’s reliance on its intermediaries (Chung et al. 2012).

According to Palmatier et al. (2015: 33), marketing channel strategy is: “The set of activities focused on designing and managing a marketing channel to enhance a firms’ sustainable competitive advantage and financial performance.” When designing international distribution channel strategies the companies must decide whether to have multichannel distribution, what type of channels to have as well as intensity and coverage of their distribution (Palmatier et al. 2015: 156). Tepstra & Sarathy (2000) state that when operating in international environment the companies also have to decide whether to standardize the distribution strategy according to market or not.

Furthermore, there are several service output demands that affect customers' channel preferences, these are, for example, bulk breaking, price, customer service, waiting or delivery time (Palmatier et al. 2015: 69), search effort, service information, quality, spatial convenience, and assortment (Mohr, Sengupta & Slater 2010: 322). When designing the channels, the companies must ensure that the channels fit the customers' processes and needs (Osterwalder & Pigneur 2010: 27). Arikan (2008: 19) even argues that customer centricity is a primary recommendation in the modern businesses, but also creating two-way value for both manufacturer and end-customer. This is achieved through profitable customer life-time value for manufacturer and valuable experience for the customer, which is in now the center of pursuits. Good and consistent experience with dialog and understanding behavior is needed (Arikan 2008: 19).

Distribution channels (or place) affect the other marketing mix (promotion, price and product) decisions and they should be made in a pursuit of maximizing value (eg, Kotler & Keller 2012: 438; Rosenbloom 2013). It has to be ensured that multiple channels fit together if they are used (Osterwalder & Pigneur 2010: 27). Mohr et al. (2010: 318) state that best practice frameworks and concepts are needed to make critical decisions concerning the channel system. When designing the channels, control versus cost decisions, including deciding which functions should the firm and which functions should the intermediaries perform, should be made. This means deciding what level of control on marketing does the firm have and what are the resource commitment costs from the functions (Kotler & Keller 2012: 449). Also, competing products, substitutes and competitors' channel structures must be studied to understand where the customers expect to find the service products (Hollensen 2007: 504). Furthermore, effective distribution channels allow developing relationships with key players, achieving cost advantages and customer satisfaction (Mohr et al. 2010: 319).

When implementing distribution channels the companies need to make many fundamental decisions as the channels create costs and are hard to reorganize once implemented (Palmatier 2015: 84). Companies have resistance for change and they prefer making decisions in which they have knowledge and earlier experience in (Luostarinen 1979). Gabrielsson et al. (2002) suggest that this also reflects to the marketing decisions and thus, when there has been positive experience in one channel strategy, whether in domestic or foreign markets, they are more prone to using the same strategy when introducing a new product. The researcher would like to highlight using existing channels as path for new products and services, because of the already established relationships. Existing channels are valuable for all of the channel members as cost of establishing new

channels is usually high for the manufacturer, whereas intermediaries can get an allocation and news source of the revenues and customers can use the channels they are accustomed to purchasing from (Evans & King 1999).

### 2.1.1 Emerging distribution channels

Here the benefits, downsides and strategies for emerging channels are discussed. Due to the advancements in technology and logistics, the companies now have better possibilities to have a direct contact with end-customers (Mooradian et al. 2012: 311). It is argued that Internet might cause bypassing and reducing intermediaries (disintermediation) as well as channel conflict due to the new channels (Hollensen 2007: 526) as it offers for the manufacturer an opportunity to implement a direct channel (Chung et al. 2012). However, these decisions should be weighted, as Rosenbloom (2013) states that the functions or activities to deliver the product or a service cannot be eliminated even though the intermediary could. Fundamentally this means that if a part of the chain is eliminated, the functions still need to be handled by someone. The Internet, thus, does not remove the need for the physical distribution, if there is a physical product concerned (Rosenbloom 2002). Furthermore, it is even implied that manufacturer's Internet transaction functionality is likely to increase the manufacturer's dependence on the intermediaries, because they are needed for delivery and supporting tasks (Chung et al. 2012).

It is said that e-business is possibly the biggest disruption to channel structures and strategies in the future, and that it will be critical for financial and strategic performance of most channel members (Palmatier et al. 2015: 315 – 316). It is claimed that the Internet is shifting power to buyers (Varadarajan, Srinivasan, Vadakkepatt, Yadav, Krishnamurthy & Krause 2010). Customers now have unlimited access to information through Internet as alternative offers, prices and products are visible online. In addition, the established companies must compete with new, purely digital retailers, which are agile due to lack of heavy resources, while the traditional companies continue to manage their own channels and conflicts, which casts new challenges (Binder 2014: 27). Customers switching between available channels has emerged new purchase patterns and increased exchange between online and traditional touch points (Emrich & Rudolph 2011). This has indicated that multichannel customer management should be a strategic marketing function and seen as a means to build competitive advantage through innovative channel designs (Neslin, Grewal, Leghorn, Shankar, Teerling, Thomas & Verhoef 2006). It is said that understanding the customer as a whole and focusing on their purchase situations and processes is needed - the service experience should fit their daily flow (Binder 2014: 18).



Rapp et al. (2008) have argued that especially technical infrastructure and external drivers e.g. shareholders, competitors and customers are important structural factors affecting implementation of electronic business in service companies. Currently, majority of companies are pursuing a mixed strategies and they see online channels as an extension to the traditional marketing (Laudon & Traver 2010: 6-50). Internet marketing can be used in cooperation with conventional, personal, marketing channels to create competitive advantage, first mover advantages and possibility for price premium through relationship building with the customers (Laudon & Traver 2010: 6-22). Nowadays the Internet offers complementarity, operational efficiency and possibility to provide additional value to the customer (Zhang et al 2010).

Still, both online and offline channels are effective in supporting customer purchase process from awareness, to search, evaluation, purchase and post-purchase. There are special features when examining offline and online channels, but fundamentally they are similar (Laudon & Traver 2010: 6-15). These two channels can be seen as a continuum, companies can promote services and new products in offline media settings to support online stores and vice versa (Laudon & Traver 2010: 6-20). Internet offers an advanced flow of information and communication with the customers, ability to adjust product offering and increased customer value. Nevertheless, creating measures, actually measuring and comparing marketing returns from both traditional and online channels is needed to ensure optimal returns (Arikan 2008: 18). Even though websites might be cost-effective, face-to-face contact might turn into higher conversion rates and higher average order values (Arikan 2008: 260).

There are many benefits listed for Internet enabled commerce. It enables the manufacturers to establish direct relationship with the end-customer that can create value. Direct contact can enable to develop a positive, long-term relationship with the customer (Evans & King 1999) and stickiness between the companies (Zott, Amit & Donlevy 2000). It also enables customization considering customer needs, conveyed messages and positioning the product or service (Laudon & Traver 2010: 6-22). Sara (1999) suggests that Internet offers cost reduction possibilities, for example, in administration. Rosenbloom (1999) and Zott et al. (2000) indicate information and transaction processing efficiency. This is due to technology, which is reducing the cost for single transaction and have made the costs minimal (Javalgi & Ramsey 2001). What is also included as a benefit is the global reach gained with the technologies (Quelch & Klein 1996). There are also chances for quality improvement (eg, more accurate data) and flexibility as well as

collaboration between manufacturer, end-customer and intermediary (Laudon & Traver 2010: 12-8 – 12-9).

Customers choose online channels mainly for convenience. Internet channels should be fast, simple and easy, for example, customer service can be provided without limitations in time (Kotler & Keller 2012: 461). According to Evans and King (1999) the manufacturers must prepare for technical issues emerging, such as, slow transmission speeds, site congestion and as well as data privacy. Also, security is still a great concern for the customers according to Gummerus (2010). Gummerus (2010) state that the customers that are concerned about security of electronic services must be considered to be convinced by publishing manufacturer's privacy policies, providing evidence of service functioning and demonstrating that the content is accurate.

As stated before, Internet offers cost reduction possibilities on the other hand, but it also involves costs, such as, investments and opportunity costs that impact the channel (Chung et al. 2012). The companies should consider managerial implications, like, channel conflict, global differences in user needs and infrastructure (Evans & King 1999). Also, it is argued that the Internet as a channel cannot replace the traditional forms completely as sometimes a direct contact with a sales person is needed, and as the buyers cannot examine the products physically in Internet environment (Rosenbloom 1999). Also, control needs and attitudes towards online purchasing are highlighted to impact channel selection between conventional format and online (Laudon & Traver 2010: 6-16).

It seems that the major downside for using an Internet channel is suggested to be negative impact on the relationship between the manufacturer and the intermediary (Chung et al. 2012). However, Chung et al. (2012) have also proposed that a transactional facility on manufacturer's website actually increases reliance on intermediaries. This may occur because pre- and post-sales service and support is important even in this case (Chung et al. 2012). It is explained by the finding that multiple channels are used to profit from growth opportunities in both offline and online channels (Venkatesan, Kumar & Ravishankar 2007). The strategy can be to allow Internet transactions only by manufacturer to enable learning, collecting customer data and brand building, but Internet business can also be open for everyone. Usually this means that the manufacturer is selling with retail prices or limited product line, which of course then reduces the attractiveness of online sales for the manufacturer (Hollensen 2007: 526 – 527).

Strategies to avoid channel conflict are listed here: 1. Manufacturer selling with no lower than retail price, 2. Leaving delivery, service and support for intermediaries even though orders are receive online or making payments for functions, 3. Providing only product and service information on Internet pages (Laudon & Traver 2010: 6-72), 4. Promoting channel members on Internet pages or encouraging them to advertise on the page, 5. Offering only limited line of products and services that especially are of interest to online customers, 6. Using different brand name for products online, 7. Communicating clearly distribution strategy and why the Internet pages are build, both internally and externally (Palmatier et al. 2015: 314), 8. Utilizing partnerships – coordinating paying overrides, assigning roles and responsibilities to gain mutual benefits, 9. Offering different products online or products in early phase of life cycle, 10. Giving higher commission to offline partners (Kotler & Keller 2012: 461).

The manufacturer might lack information on transactions beyond first level of their intermediaries. Chung et al. (2012) also state that intermediaries' investments with their end-customers increase manufacturer's reliance on intermediaries as they "own" the customers. Thus, intermediaries might be necessary for the manufacturer to distribute products and to offer value adding services as trying to build relationships with end-customers might be difficult (Chung et al. 2012). Fein (2005) states that a manufacturer can establish pay for performance compensation models to reward intermediaries, but tracking each member's effort is more difficult if the intermediaries are not taking title to the product or are not providing added-value services. Also, the intermediary might be against collecting and sharing demand data, in fear of being bypassed or the data being exploited harmfully (Sa Vinhas et al. 2010).

### 2.1.2 Service and electronic services

There are four characteristics related to traditional services: intangibility, heterogeneity, inseparability and perishability (Lindberg-Repo & Dube 2014: 123), which means that the service is produced in interaction with the customer and it cannot be stored. However, Erramilli and Rao (1993) state that international services can be separable, storable and thus exportable, which means that consumption can take place in different place than production of, for example, software. Often service components are bound to the use of tangible goods or vice versa, for example, cars and appliances need services, and services like air travel and car rentals require tangible elements to deliver the service, for example, airplanes and cars (Rahman 2004). Similarly, it is hard to categorize what is service and what is a product. Berry and Parsuraman (1991) suggest that when the source for the

fundamental benefit is the tangible element, the product is considered a good and when the source is more intangible, it is a service.

Service is considered very important in the business to business industries. Many manufacturing firms have realized the potential in industrial services that offer higher profit margins and capabilities to build deeper customer relationships, this also offers future opportunities for marketing through services (Lindberg-Repo & Dube 2014: 134). Services are increasingly used to differentiate offering, improve competitiveness, especially against low cost competitors and to enhance financial performance through steady flow of revenues (Palmatier et al. 2015: 294 – 295). Companies wish the services to increase sales, because of servicing existing installed base of customers, but services also help in activity integrations and customer lock-in by forming hard to imitate relationships (Lindberg-Repo & Dube 2014: 134). When a business customer has purchased a product, support is needed to solve issues to enable long-term relationship, positive experience and better performance of the newly purchased item (Sa Vinhas et al. 2010). DeLeon and Chatterjee (2008) claim that using third-party service providers does not decrease the value perceived by the customer. This is also why numerous manufacturing companies involve third-parties in providing after purchase support for customers (Sa Vinhas et al. 2010).

Internet has offered opportunities for new channels of distribution for products and services, and Internet of Things enables completely new electronic service development (Zhang et al. 2010). Sawhney and Zabin (2002) suggest that electronic business (including electronic services) can be considered “the use of electronic networks to enable, improve, enhance or invent a business process or system to create superior value for current or potential customers”. Rapp et al. (2008) state that electronic business has at least four value drivers for the manufacturers, namely, lock-in (gaining repeat transactions), efficiency (productivity), novelty (innovativeness in way of doing business or transactions) and complementarities (synergies and complementarities between online and offline). Electronic services can be delivered on the Internet for minimal price after their creation, because they do not require physical distribution and can be copied for further distribution at a minimal cost (Rifkin 2015). If the information streams are valuable and exclusive for a customer, charging a price may create great revenues (Laudon & Traver 2010: 6-69).

Furthermore, Scherer, Wunderlich and von Wangenheim (2015) state that information technology has changed customer service by creating new experiences. It is claimed that

due to the advancements in technology, the customers are actively co-creating value and not being a passive actor in the service delivery (Prahalad & Ramaswamy 2000). It is also stated to change how the customers encounter service providers and what the relationship with them is like, especially now that there are self-service channels available. These channels have been praised for cost-efficiency, increasing productivity and reducing the cost of delivering the service to customers (Scherer et al. 2015). The benefits of self-service is not only for the service provider, but also for the customer in terms of convenience in accessibility and availability, and improved control over the service process (Collier & Kimes 2013). E-services can improve flexibility and efficiency of reaching information (Choudhury & Karahanna 2008).

However, Scherer et al. (2015) suggest that the companies should not force customers to use solely the self-service channels, but creating understanding how and when new technologies create value and offer valuable experiences. There are certain benefits in new self-service channels, but also in the conventional, personal channels. It is stated that personal service channels increase trust, allow customization and close relationship between the customer and the service provider (Barnes 1997). It is claimed that the value created through both of these channels vary and thus substitution is not feasible (Kumar & Telang 2012). It is even stated that if self-service channels are used to completely substitute the personal service channels, the result might be harmful by decreasing customer loyalty (Selnes & Hansen 2001). It is stated that especially in the beginning of the relationship, personal contact should be offered and the value creation should be managed proactively through the whole relationship (Scherer et al. 2015).

Lindberg-Repo and Dube (2014: 118) state that for the customer to grasp the benefits of the service, value proposition with arguments on short- and long-term benefits highlighting the strategic and tactical consequences for the firm should be made. Also, front-line staff must be trained and they have to communicate the value (Lindberg-Repo & Dube 2014: 118). Gummerus (2010) indicates three different sources for value creation within e-services: service process, service content and service configuration. Service process relates to aspects about usability, privacy, security and appearance (Liu et al. 2010). Electronic services have enabled interaction and collaboration with the customer, which can lead to gaining knowledge and generation of new innovations due to information not otherwise available (Palmatier et al. 2015: 296 – 297).

Service content and value creation are related because the content actually represents what the customer is paying for (Gummerus 2010). Real-time services are a possibility to

help customers create long-term value, improve productivity and enhance safety (Vitale et al. 2011: 346). The real-time data should be translated into true added value (Lindberg-Repo & Dube 2014: 118). When reflecting to service-dominant logic and concepts of value-in-use, the customer is ready to pay a high price or continue using the service when there is value created by the use of the service (Vargo & Lusch 2004, 2008). The customer's skills and the knowledge produced by the provider, for example, are resources that together co-create value for the customer (Scherer et al. 2015). As stated before, the main tenet of service-dominant logic is that value is co-created, while it is context related and contingent on resources on the market (Lush & Vargo 2014). This fits also to the self-service environment as technology is perceived to relate to specific time and place (Al-Natour & Benbasat 2009). Thus, Scherer et al. (2015) suggest that not only the characteristics of the technology should be recognized, but also the social context where it is used.

Service configuration is about variety and scope of services that the customer can use (Gummerus 2010). Due to different backgrounds the customers have different expectations and needs for the total offering: user training and product information, support during installation and testing, financing or transaction services (Vitale et al. 2011: 346). Thus the manufacturers must consider what kind of service configuration to offer. A special characteristic of electronic self-service is that the communication does not include human interaction, one example is a web-based self-service portal (Kumar & Telang 2012). It is thus stated that self-service does not provide directed and dyadic communication between the parties (Schultze 2003). Whereas, personal service channels include direct interaction and communication between the service provider and the customer (Kumar & Telang 2012). These two types may have to be offered to create value through service configuration choices.

Even though the personal service channels include direct interaction and communication, the service can be provided remotely through a telephone or other device, which is called technology-mediated service delivery (Wunderlich, von Wangenheim & Bitner 2013). Ba, Stallaert and Zhang (2010) state that personal service channels are the only form that can provide responsiveness in customer service and that some services that are complex may have to be complemented with personal service. The contact also enhances chances for closer relationship (Schultze 2003) and as stated by Sheer and Chen (2004) not only exchange of information. Furthermore, customer trust and dependency on the service provider can be created by interaction, which demonstrated the expertise of the service personnel (Bendapudi & Berry 1997).

Kumar and Telang (2012) also state that introducing self-service might increase the pressure on customer call centers if the self-service portal is too complicated, so only appropriate tasks should be performed online. Correspondently, when tasks are complex personal service channels should be used (Scherer et al. 2015). It is also claimed that the customers' skills and capabilities affect value creation in the context of self-service (Campbell, Maglio & Davis 2011). Some customers enjoy more relationship creation and perceive relationships valuable, whereas others appreciate more the self-service benefits (Scherer et al. 2015). Scherer et al. (2015) state that the customers who choose the best channel for each task, considering their capabilities, should create the most value and best relationship. Also, the familiarity and experience in manufacturer's channel increases the customer's intention of buying more from the manufacturer (Langer, Forman, Kekre & Sun 2012).

Scherer et al. (2015) claim that when the customer is using only one channel, the customer is more prone to ending the service relationship, whatever is the type of channel. However, the customers will utilize the offering as long as it provides value (Kim & Son 2009). Multichannel services should be promoted especially to new customers to enable better experience, but also by addressing the resources and capabilities the customers have and the value they can receive from each channel (Scherer et al. 2015). All in all, the technology is developing and the electronic self-service channels can be further customized (Zhang & Venkatesh 2011) and knowledge producing capabilities can partly compensate the human interaction (Cenfetelli, Benbasat & Al-Natour 2008). As in traditional services, also in here, the distribution network has to cooperate effectively with management, customers and staff recognizing benefits for integration (Lindberg-Repo & Dube 2014: 119).

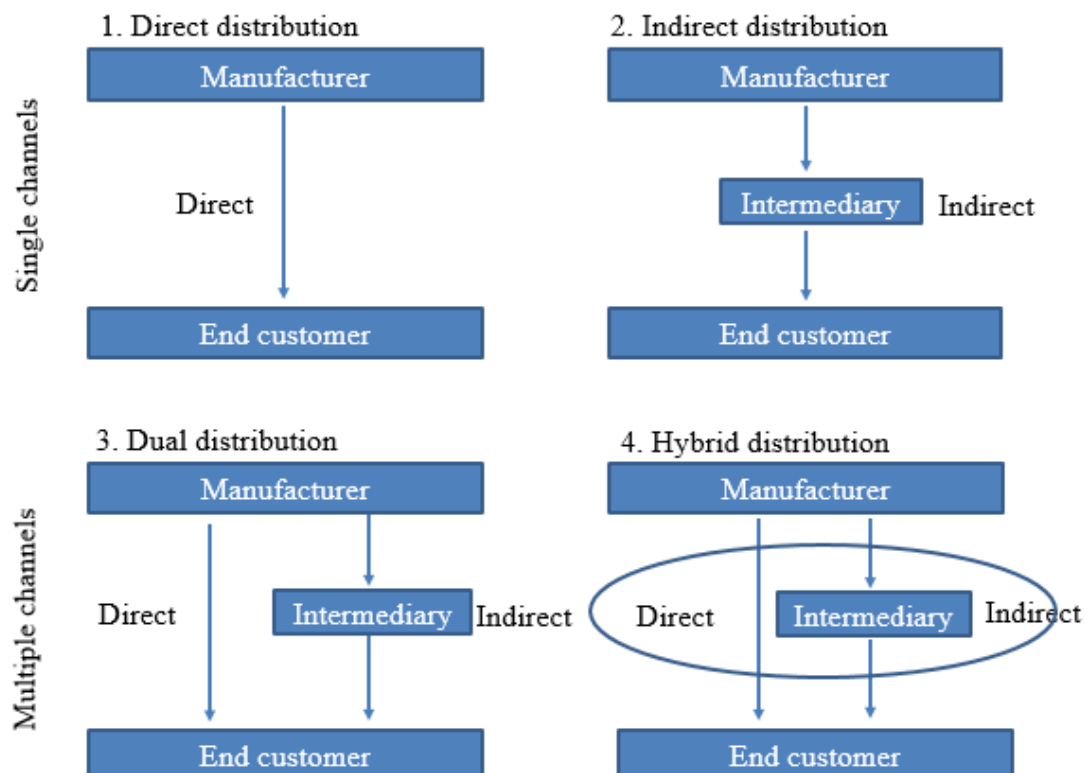
Electronic services should be designed the customer in mind utilizing everyday needs, processes and value requirements to offer the service as enrichment to the existing service portfolio. Lindberg-Repo and Dube (2014: 55) state that in addition to the offline and online decisions, different digital platforms affect customer experience and needs. For example, it is needed to be considered if the customers want to use the service on a smartphone (with Android, Symbian, Apple IOS, Windows phone platform) or whether they want it on their computers (with Microsoft Windows, Linux or OS X) or if the service is needed to be connected to the customer's systems. Mobile applications represent the most recent service innovations in corporate business and they should have an easy to use interface, creating value through the new access points (Lindberg-Repo & Dube 2014: 104). These decision are of great importance to remote services offering companies.

## 2.2 Distribution strategy

In this section, the different decisions regarding distribution strategy are examined. Multichannel decisions, channel type decisions, intensity and coverage decisions as well as standardization decisions are covered.

### 2.2.1 Multichannel decisions

A company can choose out of different distribution structures. It can use direct, indirect or multichannel distribution. According to Gabrielsson and Gabrielsson (2011) there are two dimensions that can be used for classification: directness and number of channels (see **Figure 2.**). If a company decides to use its own direct channel to reach the end customer it is called direct distribution, if it uses indirect channel that it does not own, it is called indirect distribution (Osterwalder & Pigneur 2010: 27). When only one of these choices are used it is called single channel distribution.



**Figure 2.** Distribution channel system choices. Adapted from Gabrielsson and Gabrielsson (2011).



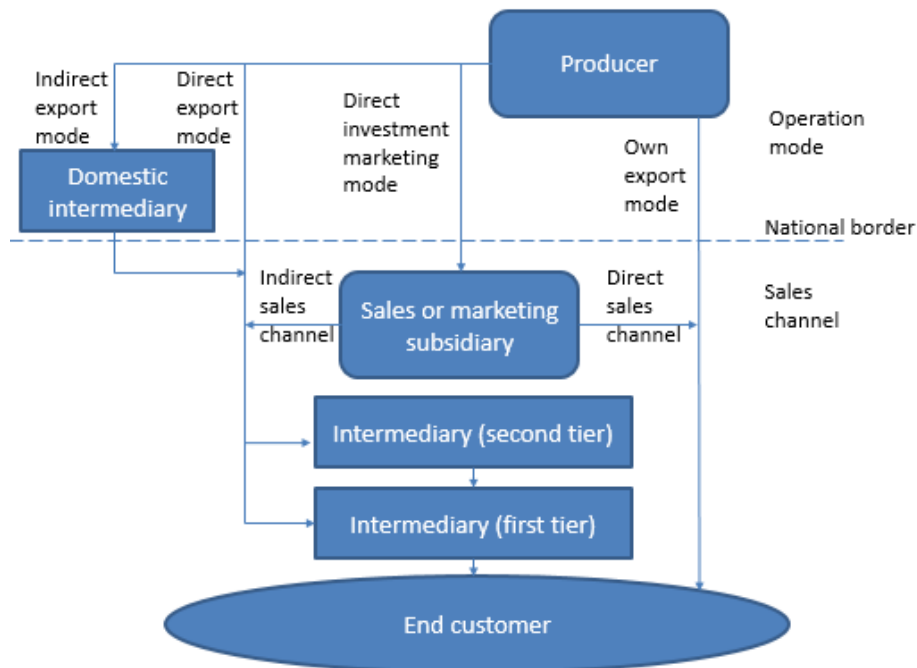
On multiple channel level, dual distribution occurs when the two channel systems are combined as parallel formation – manufacturer interacting with customer directly, whereas the intermediary working with the customer on its behalf (Gabrielsson & Gabrielsson 2011). Hybrid distribution channel means sharing channel functions between the manufacturer and the intermediary (Anderson et al. 1997), integrating different activities. For example, the sales lead is generated by the manufacturer and the purchase is made through intermediary or sales might be done on manufacturer's website, but product will be delivered by the intermediary (Tsay & Agrawal 2004). Gabrielsson et al. (2002) argued that channel relationships would explain selection among dual or hybrid channels. Gabrielsson et al. (2002) claim that dual channels suggest increased amount of possible conflicts that producer can overcome with its power within the channel, whereas hybrid channels would be chosen for increased amount of partnership advantages.

Multiple distribution channels provide manufacturers with an opportunity to either expansion through reaching different customer segments through different channels or serve the same segment's varying needs through multiple channels (Sa Vinhas et al. 2010). Different channels facilitate spreading information, interacting with the customer or intermediary, transactions and integration (Servais, Madsen & Rasmussen 2007). The literature suggest using multiple channels to increase volume and gain more revenues per customer by choosing most suitable channels for customer acquisition (Sa Vinhas et al. 2010). Multiple channels are used also to increase penetration rate, as a barrier to entry as channel systems are hard to copy and to gain complementarity of the functions (Frazier 1999). When implementing multiple channels, they should facilitate new product introductions. New products can create value by increasing margins for intermediaries and enhancing product performance for customers (Sa Vinhas et al. 2010). Sa Vinhas et al. (2010) state that this can also create challenges by forcing intermediary to decide whether to carry the product or not, when rejecting might lead to worsen the relationship.

Zhang, Farris, Irvin, Kushwaha, Steenburgh & Weitz (2010) suggest that motivation to use multiple channels are customer satisfaction and loyalty, creation of strategic advantage as well as low-cost access to new markets. Channel- and market-level information is suggested to be an important aspect and it is suggested to help meet customer needs and enhance efficiency in the channel, which then increases the value in the whole channel system (Sa Vinhas et al. 2010). Integrated marketing channel system (hybrid channel) benefits are increased market coverage, lower channel cost to reach all the customers with differentiated effort (e.g. phone calls versus personal selling) and customized selling, for example, adding more resources to sell complex solutions (Kotler

& Keller 2012: 457). Furthermore, transaction cost analysis theory implies that multiple channels can be utilized to increase the sales volumes, when the economies of scale and scope are wanted in diversified markets to manage a large number of transactions and uncertainty related to diverse transactions (Gabrielsson et al. 2002; Mols 2000).

When discussing distribution channels across international markets, the same rules apply as presented previously (see **Figure 3.**). It is stated that international business literature examines these based on the foreign market entry mode (Kirpalani, Reid & Rosson 1987; Luostarinen & Welch 1990). Direct export means that a company in the home market handles export activities for itself, exporting the goods or services to another country (Luostarinen & Welch 1990: 21 – 25). In this type of exporting, there is no intermediary between the producer and the end user, but the producer conducts all of the exporting activities across the border to the end customer. In comparison, the producer can use an intermediary to cross a national border, which is considered indirect distribution (Luostarinen & Welch 1990: 27). In case of market expansion, the company may want to reduce risks and uncertainty and establish presence in a foreign market (Luostarinen 1979: 188). These sales or marketing subsidiaries may handle sales directly within that market or use an intermediary, which is considered to be an indirect channel (Luostarinen & Welch 1990).



**Figure 3.** Entry, penetration modes and sales channels for international expansion. Adapted from Gabrielsson et al. (2002).

Furthermore, indirect distribution can have several levels (Luostarinen & Welch 1990: 27). For example, a distributor might buy products from a manufacturer, but instead of selling directly to end customer, it further distributes goods to OEMs or retailers. Some OEMs prefer this, because of variety that distributor has to offer. It reduces the transaction costs, not having to obtain variety of different components from different manufacturers. Blythe (2006: 109) argues that cheap and standard product often is distributed in longer chains while it seems to add value and improve efficiency based on large quantities, whereas customized and more expensive products have shorter chains. Chung et al. (2012) state that it is crucial to understand factors that affect the presence of intermediaries, in the value adding channels, when there is digitalizing business and new, contemporary selling activities by the manufacturers. Previous discussion leads us to examining channel type decisions in international distribution channels.

### 2.2.2 Channel type decisions

Here the different kinds of channel types are presented. The types include company-owned and intermediary based types, with direct or indirect channels between the manufacturer and end customers. The manufacturer can either manage distribution directly, without utilizing intermediaries and using different company-owned channel types to create value (Sa Vinhas et al. 2010). They can also distribute through intermediaries that utilize multiple channel types in the same or different territories (Sa Vinhas et al. 2010). The decisions involve location type (whether it is home or somewhere outside), type of technology (personal contact, paper catalogues, Internet pages or phone calls etc.) and intermediary types (distributors, original equipment manufacturers, integrators, retailers and so on). Type of distribution is affected by efficiency. Some types are more efficient in handling certain tasks and the functions should be located there (Rosenbloom 2007). The costs, benefits and disadvantages are driving the functions to the most efficient channels eventually (Rosenbloom & Larsen 2008). For example, manufacturer's own sales force can be effective when direct, competent contact is needed for sales.

The channel types provide customers with different service outputs and thus, the same products or services can be offered in several channels, even with different prices (Palmatier et al. 2015:179). Different types of channels enable the customers to exploit service outputs in one source, but also to make purchase in another one (Palmatier et al. 2015:179). This is called the research shopper phenomenon, which means a tendency of the customers to use one type of channel for search and another channel for buying

(Verhoef, Neslin & Vroomen 2007). This can interfere the channel equity and direct the cash flows to the cheaper types of channels, even though the others would ignite the purchase intention (Palmatier et al. 2015: 179). Thus, the type and coverage decisions must be considered together. Sometimes it may be necessary to balance or compensate the flows between different types of channels to avoid “free-riding”, meaning the costs occurring in one place, but revenues earned in another (Palmatier et al. 2015: 179).

When planning and implementing channel strategies, it is a primary consideration of weighing the marketing institutions (types) that are capable of performing the needed marketing functions (Frazier 1999). Certain products are strongly associated with different types of channels and determine the channel type used. Different types of channels have different means for selecting, buying and receiving the products or services. Furthermore, Internet can be seen as a cause for conflicts, but it can also be an opportunity and actually increase the size of the pie. This can be achieved by either offering differentiated products in the Internet or by reaching new customers (Palmatier et al. 2015: 179 – 181). It is also stated that even though an Internet channel could be realized, it might be that is not efficient economically (Rosenbloom 2007).

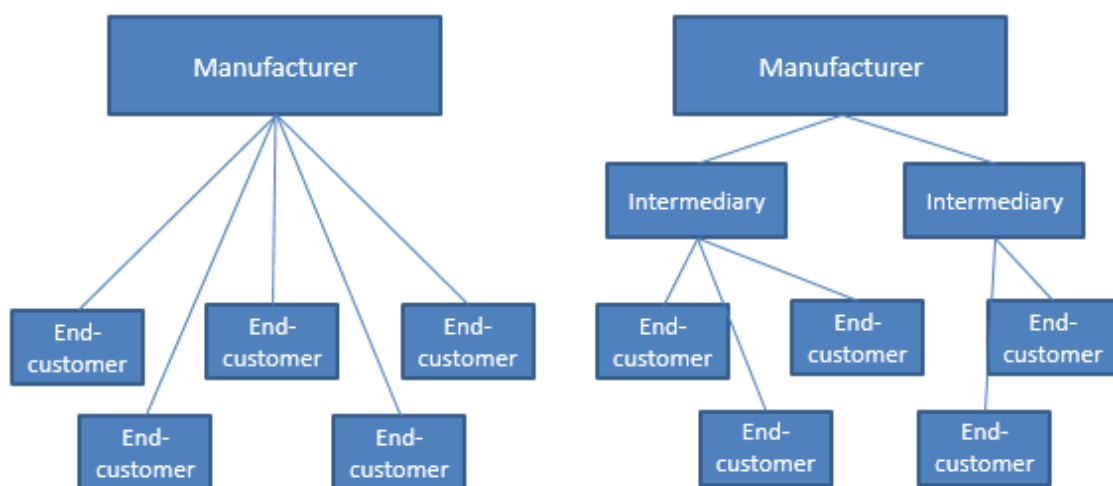
### 2.2.3 Channel intensity and coverage decisions

In this part intensity and coverage decisions of channel design are discussed. When making intensity and coverage decisions, there are many things to recognize. Palmatier et al. (2015: 163 – 179) have indicated eight factors affecting decision making. These are channel competition related aspects (competition to avoid complacency), product category (service output demands), brand strategy (commodity, premium, niche), channel influence (rewards, investments), dependence balancing (allowing mutual dependence, reassuring channel partners), opportunity cost (level of competition), transaction cost (intensity/costs) and finally, other manufacturer’s strategies (creating demand for carrying the products) (Palmatier et al 2015: 163 – 179). The intensity and coverage decisions can then result into intensive, selective or exclusive distribution on the market. These decisions reflect the availability of the product or service within a market. Intensive distribution means offering goods in as many places as possible and exclusive distribution having very limited availability through few channels (Hollensen 2007: 511).

To examine how these factors can affect distribution decisions product and cost effects on channel intensity are covered briefly. Product category and characteristics affect customer needs and behaviors as mentioned earlier (Hollensen 2007: 508). Mooradian et

al. (2012: 316) suggest that the companies should examine whether there is need for guidance or other support when purchasing, need for service and support after purchase as well as need for convenience and extensive availability. These needs affect distribution channel decisions, for example, when there are high support needs there usually needs to be limited distribution to provide the needed level of support. Contrary, when customers require convenience in buying and do not need much support, there should be intensive distribution to ensure that people get what they want to buy - when they want to buy (Mooradian et al. 2012: 316). For example, fast moving consumer goods should be distributed intensively as they have multiple substitutes.

Additionally, cost and margin structures affect the decisions where the functions are performed and how they are performed (Osterwalder & Pigneur 2010: 27). Costs are important in a channel system as they affect the marketer directly and indirectly through channel partners (Mooradian et al. 2012: 316). Transaction cost reductions are one of the most important elements for using intermediaries, as they reduce the points of contact for the manufacturer (see **Figure 4.**) and thus reduce selling costs, but it must be considered that intermediaries also lower margins (Osterwalder & Pigneur 2010: 27). However, the value that multiple channels create can justify lost revenues. Multiple sales channels can be deployed to increase sales volume, to handle large number of transactions and to manage external uncertainty (Mols 2000).



**Figure 4.** Intermediaries reduce costs of serving diverse customers. Adapted from Palmatier et al. (2015: 176 – 177).

Costs for serving the customer directly and bearing opportunity costs are a concern for manufacturers, thus it many times leads to willingness of sharing the risk with downstream channel members in exchange for less control (Gabrielsson 2002). Also, with the help of intermediaries the manufacturer can seek for greater intensity to gain economies of scope and scale in serving the customer base (Palmatier et al. 2015: 176 – 177.)

#### 2.2.4 Standardization of distribution strategy

Increasingly, the globalizing companies must decide whether to standardize or adapt their distribution channels according to market (Dimitrova & Rosenbloom 2010). Standardization enables economies of scale and scope, but also control and coordination over the marketing activities (Levitt 1983). However, international context and culture creates challenges in decision making (de Mooij 2014: 272 – 273). Global-local dilemma addresses the needed decisions whether to sell products and services in a standardized manner or adapted according to the market (de Mooij 2014: 11). Tepstra & Sarathy (2000) claim that even though there are global similarities, some dimensions still vary between cultures and countries, which force the companies to adjust their strategies accordingly. It is claimed that some level of adaptation is needed in most companies and that local knowledge is needed to make marketing decisions (Walters 1986). Furthermore, it is argued that foreign markets need adapting of services (Javalgi & White 2002). It seems thus probable that manufacturers have to consider service distribution adaptation.

Theodosiou and Leonidou (2003) explain that contingency approach has tried to consider standardization and adaptation literature by stating that standardization and adaptation are not in isolation, but they should be examined in relation to each other. It tries to explain that there is not only one strategy that is best for a company's performance (Hofer 1975). There are many variations in between and neither one should be considered the only acceptable solution, but companies should be prepared to have a suitable degree of both approaches (Theodosiou & Leonidou 2003). This means that firms should find strategies that fit them best and align resources to the conditions of certain markets. In different markets the ideal channel might not be available and what works the best depends on several reasons. Thus, also Mohr et al. (2010: 330) have claimed that contingency theory of channel design and management is warranted. Customers in different target markets need different combination of services and thus unique channel designs (Vitale et al. 2011: 334). It can be stated that in the light of recent studies distribution channel decisions depend on context (Sousa & Lengler 2009).

## 2.3 Value in channel relationships

Now we will examine deeper the value, relationships and the channel value network related to distribution channel literature. It is stated that value can be increased through goods and services or relationships between buyer and sellers (Lindgreen & Wynstra 2005). Thus there is also a long history for investigating value in business relationships according to Chung et al. (2012). Relational value, value in cooperation and collaboration within the channel, can reduce transaction costs and increase long-term benefits, through trust, information sharing and commitment (Pardo, Henneberg, Mouzas & Naude 2006). To ensure effectiveness of the channels complementarity between channel members should be consider (Chung et al 2012).

### 2.3.1 Value within distribution channels

According to Grönroos and Helle (2010) value has technical, monetary and perceptual dimensions. Technical dimension consists of process functioning and efficiency related aspects. Monetary dimension comprises of cost savings and business growth, and perceptual dimension relates to performance perception, trust, commitment and attraction (Grönroos & Helle 2010). This is mainly in line with Sa Vinhas et al. (2010) more simple claim that value can be defined in tangible benefits (eg, product or service benefits) and intangible benefits (eg, satisfaction and relationship). It is thus stated that value can be derived from manufacturer's and intermediary's inputs to the business relationship (Chung et al. 2012). It is suggested that these benefits and dynamics of value creation should be understood by all of the companies playing their role in the channel system (Sa Vinhas 2010). The value created is stated to be greater than the cost of the relationship (Lindgreen, Antiocho, Palmer & van Heesch 2009). As can be interpreted, even if disintermediation would be possible especially with the help of emerging channel structures, this strategy has it downsides and might restrict the generated value.

Ulaga and Eggert (2006) claim that value in business markets is derived from the benefits of core offering, the sourcing process, service support and personal interaction, but also through customer operations, including supplier know-how. Mooradian et al. (2012: 316 – 317) indicate that the companies should examine what the customers want and need from the distribution system. It is suggested to first study target segments and their needs, then create alternatives of channels by segment, and finally do cost and benefit analysis for the alternatives to maximize value derived from distribution channels (Rangan, Menezes & Maier 1992). If multiple channels are used they should create value, which

means that the functions should also be complementary and effectively implemented (Frazier 1999). Furthermore, when marketers have decided the channels to enter the market, screening and selecting intermediaries is important by using criteria important to reaching company goals. The intermediaries' financial information, marketing management expertise, reputation, technical know-how, facilities and service support capabilities are especially important in value creation for high-technology companies and they should be evaluated (Hollensen 2007: 515).

### 2.3.2 Relationships within distribution channels

The literature on long-term channel relations has mainly tried to explain how the relationships develop over time and it has been argued that these relationships can both culminate to partnership advantages (Sethuraman, Anderson & Narus 1988) or channel conflicts (Frazier 1999). Gabrielsson and Gabrielsson (2011) argue that that long-term channel relations affect the choice of channel, especially, when considering multiple channel decisions between dual and hybrid structure. They claim that dual channels are used if the manufacturer has enough power to handle increased channel conflicts. Whereas, for a hybrid structure trust and commitment are important, which are claimed to develop with the help of personal communication and relationships. Relationships are also needed to develop market knowledge (Gabrielsson & Gabrielsson 2011). Intermediaries can provide forecasts of market needs and provide market information, with the help of which, manufacturer can understand unmet needs and to work towards enhancing the value to the end-customer (Vitale et al. 2011: 344). Balancing between the advantages and conflict is based on several factors moderating the relationships (Blythe & Zimmerman 2005: 244). Conflict and moderating factors power, trust and commitment are presented below.

*Conflicts* mean opposition by the channel members or dissonance within the chain, within channel relationships conflicts are on some level even wanted (Rosenbloom 1978). The disunity can be used to strengthen the relationship, if it is managed appropriately and to maximize channel performance (Palmatier et al. 2015: 350 – 351). According to Palmatier et al. (2015: 350) a conflict arises when a channel member sees the other (downstream or upstream) member opposing its goals, for example, a member might seek something that the other member controls. They also state that each channel member seeks to maximize their own profits and thus it leads to use of power to control another member (Palmatier et al. 2015: 350 – 351). It is stated that differing goals, different perceptions of reality and wanted autonomy affect conflict creation (Etgar 1979).



There are not only dyadic conflicts including manufacturer and intermediary, but Palamountain (1967) has argued that three different kinds of conflicts emerge: vertical, horizontal and multichannel conflicts. Vertically, channels can have conflict on different levels of the same channel, horizontally there might be also be conflicts in between the members on same level of the channel. Multichannel conflict emerges when multiple channels compete against each other on the same target market (Kotler 2003: 553–554). The brand might face intra-brand competition between the channels, overlapping of channels in regions and reduced ability to support the channels (Frazier 1999). When cannibalization between different channels happens, there is a risk for reduced motivation of the channel members (Tsay & Agrawal 2004).

*Power* can affect in its many forms and affect cooperation between the channel members. Power can be described as something that one channel member uses to influence the other parties decision (Dahl 1957). *Reward power* means that manufacturer can offer certain incentives for the intermediaries performing functions for it. *Legitimate power* is used when manufacturer uses agreement terms for its benefit. *Expert power* can be seen in manufacturer exploiting its expert position by controlling knowledge that is valuable for the intermediaries. *Referent power* indicates the manufacturer being highly valued and there is a positive will of being identified to have relationship with it. *Coercive power*, threatening to withdraw from the partnership or part of it, is an ultimate source of power and is not recommended. (Kotler & Keller 2012: 450; Palmatier et al. 2015: 324 – 332)

It has been said that *trust* and *commitment* generated by it, form a basis for business relationships, which is related to honest and fair behavior and two-way information exchange with interest in both parties well-being (Palmatier et al. 2015: 394). Also, trust is related to the profitability of the business relationship. Time and shared experiences are a basis for a long-term cooperation and can be seen as a glue between the partners (Li & Dant 1997: 205). Both parties need economic satisfaction, but they also need to have functionalities to cooperate and good use of power for the both channel members' benefit, not to exploit one another (Palmatier et al. 2015: 397).

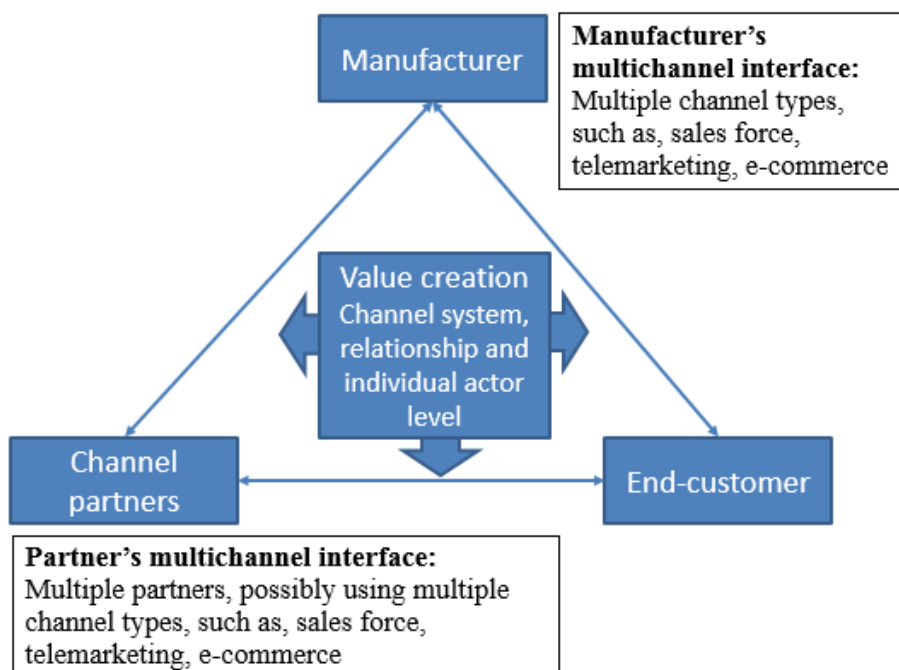
### 2.3.3 The channel value network

Many support the argument that there is a trend towards customer orientation (eg, Thron, Nagy, & Wassan 2007). Also Gundlach, Bolumole, Eltantawy and Frankel (2006) have indicated results of channels being more consumer-oriented and forming value adding chains of large amount of members in the network. This is in line with co-creation of

value concept introduced by Vargo and Lusch (2008). Leavy and Moitra (2006) claim that product-centricity and traditional models of doing business are challenged by digitalization, ubiquitous connectivity and blurring technological and industry boundaries. It is further exhilarated by customer-driven innovation and customer-driven value creation (von Hippel 2005). When discussing services, there are two major logics. Service as a business logic means the facilitation of customer value creation, focusing all of the company's activities on helping customer create value (Grönroos & Helle 2010). Service-dominant logic on its behalf has the basis in understanding the customer's perspective on value creation and their environments (Vargo & Lusch 2008). Distribution channel members thus need to understand the customers, in order to decide how to best position and distribute the service products to enable value creation.

Sa Vinhas et al. (2010) state that especially a business to business channel network can be complex. This is because they have multiple tiers of indirect channel participants and the transactions go through a variety of different organizations: industrial, institutional, commercial, wholesale, or retail organizations before the good reaches the end-user. As these channels are complex, the manufacturer does not necessarily fully understand its own distribution system and does not know the identities of the resellers or customers farther down in the chain (Sa Vinhas et al. 2010). This is, though, changing because of the impact that Internet has in enabling relationship development also with the end-customers (Lindberg-Repo & Dube 2014: 56).

In the channel systems the manufacturer, intermediaries and end-customers are forming a triangle of value creation (Vargo & Lusch 2008). These channels can include for example, manufacturer's own telemarketing, sales force and Internet channels as well as varying entities external to the firm, called intermediaries, performing different distribution functions. These multichannel actors together co-create value within the channel system (Vargo & Lusch 2008). It is stated that the channel system decisions and management affect value creation within the system. Sa Vinhas et al. (2010) also claim that value is created for individual actor level, on a relationship level and channel system level (see **Figure 5.**). They also state that the channel systems should be examined further on each of these levels (Sa Vinhas et al. 2010). This thesis addresses this concern and examines value creation from manufacturers' perspective and perceptions of relationship level value creation. Chung et al. (2012) confirm that there are complementary roles for intermediary and manufacturer in creating value for the customer that need to be considered related to distribution.



**Figure 5.** The channel value network. Adapted from Sa Vinhas et al. (2010).

## 2.1 Product-technology characteristics and maturity

One of the distribution channel strategy affecting factors is claimed to be the product-technology. Product-technology affects the willingness of the intermediaries to distribute the product, suitability for different types of distribution channels as well as intensity and coverage decisions. The nature of the product, for example, durability, complexity, needed customer service, unit cost and handling affect distribution (Hollensen 2007: 508). In addition, product-technology maturity or product life cycle explains the life time from initial product specification to withdrawing the products and related services from customers' reach (Krishnamoorthi 2012). In this research the cycle is applied to the specific context of the manufacturing companies and the service product format and it is claimed that less complexity, increased demand and product-technology maturity allow utilizing multiple channels and types, but also to increase intensity and coverage on different markets. It is used to explain the stages in which the channels develop.

### 2.1.1 Product characteristics

Product category and characteristics affect customer needs and behaviors as mentioned by Hollensen (2007: 508). Required guidance and other support when purchasing affect distribution choices (Palmatier et al 2015: 163 – 179). Customers may need service and

support after purchase, for example, when there are high support needs limited distribution supports in providing the needed level of support. Whereas, when the customers require extensive availability, convenience in buying and need limited amount of support, there should be more intensive distribution to ensure end-customer satisfaction. For example, inexpensive goods are usually distributed intensively as they have multiple substitutes and expensive products tend to have limited availability (Mooradian et al. 2012: 316.)

Laudon & Traver (2010: 6-16) claim that the product characteristics also affect the suitability for Internet sales: it depends if they are physical or digital, what the customer segments' needs are and their capabilities in using the product or service, familiarity with the brand and possible website features. Also, control needs and attitudes towards online purchasing are highlighted to impact channel selection between conventional format and online (Laudon & Traver 2010: 6-16). System product that consist of mixture of product elements, for example, software, hardware, services and know-how (Gabrielsson & Gabrielsson 2011) can be harder to market all in all and especially on the Internet. This kind of product requires special competences from the manufacturer or intermediaries, because of the need to install and configure it (Gabrielsson et al. 2002).

Business to business manufacturers tend to use third-parties in support them in sales or service and manufacturers must consider installation, training, maintenance and upgrades as a part of their post-sales service which is an important criteria for the customer (Rao & Klein 1994). However, distributors might be reluctant or incapable to develop product and market specific knowledge, and might not be able to offer the same level of expertise as the manufacturer (McNaughton 2002). It is stated that whenever the intermediary has to grow resources, reluctance might appear, especially when the volumes in the sales are still low (McNaughton 2002). Furthermore, using an intermediary can also be a barrier for the manufacturer, if it wants to have direct interaction with the customers and enable learning about the needs on the markets (Cornish 1996).

### 2.1.2 Product-technology model

Krishnamoorthi (2012) states that literature has indicated that here are several stages that can be identified within the product life cycle. Grantham (1997) states that each stage differs and thus, the companies must adapt their strategies accordingly, to enhance value and increase profitability. According to Kotler (2003) when the product is newly developed and introduced to the market, it is called introduction stage. Once it is on the

market successfully growing sales and gaining awareness it reaches growth stage. When sales start stabilizing and there is significant replacement demand, it is called maturity. Finally when the product demand starts to decline and the product is withdrawn or re-developed, that is the decline stage (Kotler 2003). The main dimensions include sales changes, identifying the stage and sequential sales behavior (Grantham 1997). Demand is different throughout product life cycle which relates to the experience customers have with the product or service (Hollensen 2011: 551 – 554). This affects the whole marketing mix decisions, including distribution. There is, though, criticism towards the product life cycle model, but it seems to be capable of describing different stages related to sales and market acceptance, even though it might not be suitable framework for deciding the fate of the product (Grantham 1997).

The product-technology life cycle model pursues to illustrate which stages exist for product-technology in its development path (Moore 1991). To consider the development of the channel the product-technology model's effects on distribution channels is discussed. The main idea behind the model is to explain which channels are best to reach customers in each life cycle phase (Grantham 1997). Gabrielsson et al. (2002) add that the biggest benefit of the product-technology life cycle seems to be that it is able to address the development aspect of the channels. Product-technology life cycle is able to explain the channel expansion into multiple channels through the diffusion of the product technology into a broader customer base (Lele 1986).

The theory proposes that when the product-technology is proprietary (introduction stage) and it is sold mainly to early adopters through direct sales representatives by the producer or via indirect sales force which is mainly due to customers' needs for heavy support related to this product-technology (Moore 1991). When the product-technology starts reaching majority of the customers and the solution stage, dual channel is seen as a feasible solution to serve more customers (Lele 1986). McNaughton (2002) claimed that diversity on a mature market, meaning market with various customers and competitors, is positively related with multiple channels. This means that when there is diversity a company needs to adapt the channels to serve various customers' needs and demands, the help of intermediaries is important (McNaughton 2002). However, solution-based product includes hardware that has become standardized and software applications that require system integration skills (Gabrielsson et al. 2002). So the dual channel intermediaries must be skilled enough to conduct these activities. Further development of product-technology into a mature stage and reaching the late majority of the market, multiple channels are seen valuable to service the customers as low price start playing a

bigger role here (Lele 1986). The decline stage serves the technological laggards and firms tend to use hybrid or direct distribution channels to serve the low cost need of the market (Moore 1991).

## 2.2 Market diversity

Different cultures, countries and different customer segments have varying preferences for the channels, and thus research and market knowledge is needed before making international distribution decisions (Mohr et al. 2010: 322). International context and culture increases challenges in decision making (de Mooij 2014: 272 – 273) and it is argued that distribution channels are needed to be adapted on some level by most companies (Walters 1986). Market diversity is claimed to affect utilizing multiple channels to penetrate better the local markets and to serve different segments. Furthermore, market diversity is related to adaptation of channel strategies, which is needed when there are significant differences between the markets and segments.

### 2.2.1 Market and customer characteristics

Certain determinants, like, customer characteristics (size, geographic distribution and buying habits), nature of product (durability, ease of implementation, needed customer service, unit cost and handling), nature of demand and location (eg, country's stage of economic development, product experience and use) affect channel decisions internationally (Hollensen 2007: 508 – 509). Legalities and local business practices might additionally restrict certain channels or interfere exclusive sales agreements (Douglas & Wind 1987). Also, local business practices affect distribution decisions, as in some markets different institution might be stronger and have power over the others (Hollensen 2011: 551 – 554). Furthermore, timing is said to be critical, because on immature market channel structure establishments and relationship maturity are low, which makes the target market more attractive, leaving space for new products and services to gain foothold (Palmatier et al. 2015: 297). However, the market has to have enough demand for the service product for it to be attractive for the intermediaries. If the product is new and there is not enough demand, the intermediaries might be reluctant to distribute the service product (McNaughton 2002). Thus manufacturer might not be able to penetrate the market in case of lacking resources or market knowledge.

Also, the manufacturer might lack resources, knowledge and relationships on foreign markets and thus intermediaries can provide expanded reach (Zhang et al. 2010). Relationships with local intermediaries can be used to develop market knowledge (Gabrielsson & Gabrielsson 2011). They provide information on market needs and provide market information, with the help of which, manufacturer can understand unmet needs and to work towards enhancing the value for the end-customer (Vitale et al. 2011: 344). As Chung et al. (2012) state, intermediaries' investments with its end customers increase manufacturer's reliance on intermediaries as they "own" the customers. Thus on some markets or segments it might be necessary to utilize certain intermediaries.

Product-market diversity, for example, competition, demand on the market and different kinds of customers, must be considered and combinations must be created when entering a market: penetration rates, wealth, cultures, instructions, training and other aspects might be needed to consider (de Mooij 2014: 272 – 273). Internet access and the scope of usage is increasing, though, it varies for what purpose the Internet is used and by who. Javalgi and Ramsey (2000) have listed four factors impacting the diffusion of global e-commerce. These are social and cultural infrastructure, commercial infrastructure, computer and telecommunications infrastructure as well as government and legal infrastructure, in order to success in e-commerce, these factors must be supported (Javalgi & Ramsey 2000). This of course affects the ability to distribute the service product.

### 2.2.2 Factors affecting standardization

Management of distribution channel may be challenging due to variation between channel structures and strategies globally and thus studies have recommended a customized approach for distribution (Sousa & Lengler 2009), as standardization is stated to be difficult (De Búrca, Fletcher & Brown 2004). When offering customer service and other product services, distribution cannot be standardized according to Vrontis (2003) thus he has argued that companies increasingly have to customize their approach. Also, Theodosiou and Leonidou (2003) claim that distribution requires most adaptation in comparison to the other marketing mix elements. Especially as companies operate internationally and are pursuing to increase international sales, it is natural that pressure to adapt distribution strategies increase as market diversity grows.

There are arguments against standardization. Factors that work as barriers, according to Dimitrova and Rosenbloom (2010), are culturally distant distribution behavior (cultural differences), distributive institution rigidity (economic, political, social, competitive and

technical developments) and international functional fragmentation (types and sizes of intermediaries not performing same functions between countries). Even though there is development towards homogeneity between markets, it is probable that companies still face challenges in different parts of the world and that the infrastructure related factors affect distribution decisions. Walters (1986) claims that competition, possible substitutes and existing contracts within the markets may have influence in introducing new products and services, which can make entry to the market harder. This must be considered when selecting target markets.

The factors that push towards standardization are communication, global uniformity, consistency and image, easier planning and controlling, stock cost reduction as well as synergies (Vrontis 2003). Even though different markets can vary, according to Shoham (2002) homogenous submarkets can be identified through segmentation which also enables positioning according to the segments. Furthermore, it is stated that segmenting customers by the demographics and attitudinal data can be of assistance to enable enhanced customer retention and addressing the different segments better (Scherer et al. 2015). Especially when there are global segments that have been identified certain amount of standardization becomes feasible (Chung 2005). Thus, companies should seek information on demographics, customer needs and other market related factors (Laudon & Traver 2010: 6-4 – 6-5). The marketers cannot affect demographic background, but branding, communication and firm capabilities can be changed, which is fairly cost-effective on the Internet (Laudon & Traver 2010: 6-13).

## 2.3 Conceptual framework and hypotheses

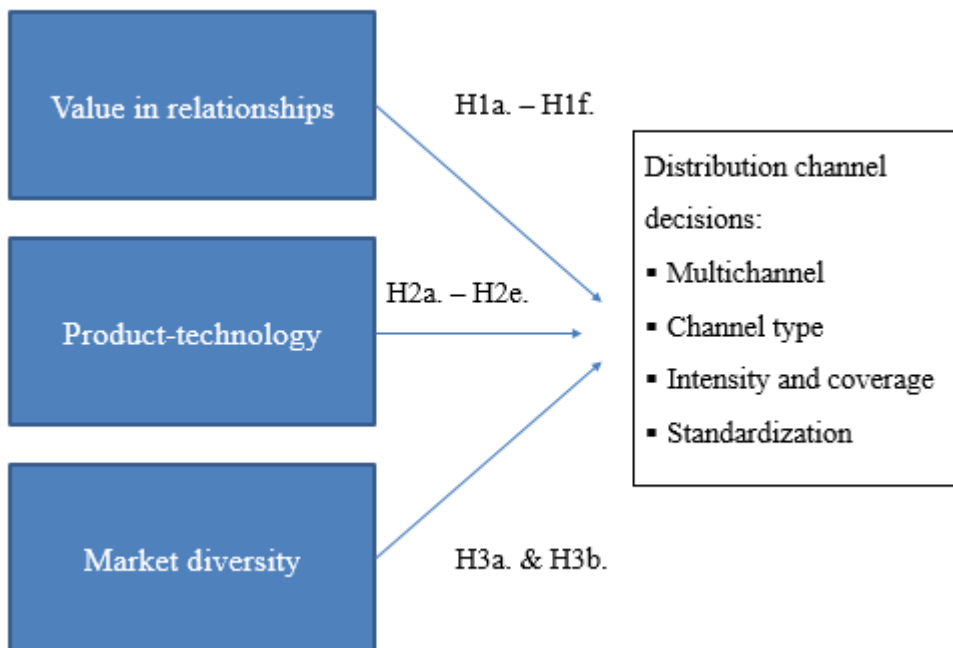
In this section I am going to present the framework and hypotheses derived from the previous literature review. The three major aspects that are hypothesized to affect channel decisions are: value within channel relationships, product-technology maturity and market diversity. First the conceptual framework is explained and then propositions are examined in detail.

### 2.3.1 Conceptual framework

First of the three theoretical approaches proposed to affect channel decisions is value in channel relationships (see **Figure 6.**). Partnership advantages and existing relationships are hypothesized to affect distribution strategy shift from single channels towards multi-



channels, either dual or hybrid structure (Gabrielsson et al. 2002). Cooperation within channel can create value for customers, but also for the channel members (Sa Vinhas et al. 2010). The tighter the relationship is between the intermediary and manufacturer, the more the manufacturer is willing to restrict intensity and consider value for the intermediaries. Furthermore, all of the channel decisions must create value for the channel participants (Chung et al. 2012). This must be considered in multiple channel decisions, channel types, intensity and coverage as well as standardization.



**Figure 6.** Conceptual framework of the research.

It is proposed that product-technology characteristics and maturity affect customer needs and behaviors (Hollensen 2007: 508). The studied service products' characteristics, customization needs and complexity are claimed to affect distribution, as Gabrielsson and Gabrielsson (2011) have claimed that products consisting of mixture of product elements are more difficult to market especially through the Internet. Product-technology maturity stages affect the pace in which channel strategy evolves and through which channel types it can be distributed (Lele 1986). Demand on the market for the service product increases sales potential, and forces the manufacturer to consider multiple channel types as well as intensity and coverage of distribution.

Market diversity is claimed to impact multichannel decisions of the distribution channel strategy as well as standardization decisions (Dimitrova & Rosenbloom 2010). Thus it is proposed that when there are differences between the target markets and home market it leads to more adapted strategy when distributing service products. Furthermore, pursuit to expand to new markets increases the probability of utilizing multiple channels to serve diverse customers and markets by utilizing local relationships. The company might have to adapt to local distribution structures and choose the type of distribution accordingly. Nevertheless, the companies pursue gaining economies of scale by identifying global segments that they can serve in standardized manner (Shoham 2002).

### 2.3.2 Hypotheses

Each of the propositions are placed in **Figure 6.** to give a clear understanding of the proposed contingencies. The first hypotheses H1a. – H1f. are related to value in relationships, the second group of hypotheses H2a. – H2d. are related to product-technology maturity and the last ones, H3a. and H3b., consider market diversity aspects. The proportion of the hypotheses is also related to the emphasis that is pursued within this master's thesis. The hypothesis or hypotheses follow the introduction.

#### **Value in relationships**

Companies can choose whether they want to have direct distribution through the company's own channels or whether it will use indirect channels, or both. Arguably, multiple channels can lead either to partnership advantages (Sethuraman, Anderson & Narus 1988) or conflicts (Moriarty & Moran 1990), moderated by power, trust and commitment (Dwyer, Schurr & Oh 1987). Literature suggests that multiple channels are used to increase volume and gain more revenues. Motivations to use multiple channels are customer satisfaction and loyalty, creation of strategic advantage as well as low-cost access to new markets (Zhang et al. 2010). There are also other partnership advantages, which include access to knowledge, sharing of risks and access to complementary skills (Powell 1987). Additionally, revenues per customer can be optimized by choosing the most suitable channels for customer acquisition (Sa Vinhas et al. 2010). When the business customer has purchased something, support is needed to solve issues to enable long-term relationship, positive experience and better performance of the newly purchased item (Sa Vinhas et al. 2010). DeLeon and Chatterjee (2008) claim that using third-party service providers does not decrease the value perceived by the customer. This

is also why numerous manufacturing companies involve third-parties (multiple channels) in providing after purchase support for customers (Sa Vinhas et al. 2010).

Gabrielsson and Gabrielsson (2011) argued that channel relationships would explain selection among dual or hybrid channels. It is stated that dual distribution strategy is an adversarial strategy and a potential source for conflicts and thus, also decreases partnership advantages (Gabrielsson et al. 2002). They state that dual channels suggest increased amount of possible conflicts that producer can overcome with its power within the channel. In dual distribution, the manufacturer and the intermediary are in competition with each other (Gabrielsson et al. 2002). Cooperation happens in hybrid channels, which are chosen for partnership advantages achieved through trust and commitment (Gabrielsson and Gabrielsson 2011). Multiple distribution channels provide manufacturers with an opportunity for expansion by reaching different customer segments through different channels or serve the same segment's varying needs through multiple channels (Sa Vinhas et al. 2010). Thus, it is proposed that:

**H1a.** Multiple channels (hybrid/dual) are used when there are partnership advantages that can be achieved.

**H1b.** Dual channel emerges when the relationships with used intermediaries are more transactional and cooperative partnerships do not exist.

**H1c.** Hybrid channels are more common in a channel where the manufacturer and intermediary have close, cooperative, relationship and are considered as partners.

When implementing multiple channels, the companies need to make many fundamental decisions as the channels create costs, and are hard to reorganize once implemented (Palmatier 2015: 84). It is also stated that companies have resistance for change and they prefer making decisions in which they have knowledge and earlier experience (Luostarinen 1979). Gabrielsson et al. (2002) suggest that this also reflects to the marketing decisions and thus, when there has been positive experience with one channel strategy, whether in domestic or foreign markets, they are more prone to using the same strategy when introducing a new product (or service product in this case). Once a channel structure is decided, it reinforces itself, making it easier to follow the earlier decisions than to make changes (Sa Vinhas et al. 2010). It can also be claimed that using existing channels as path for new products and services is more probable, because of the already established relationships and trust (Dwyer et al. 1987). Time and shared experiences are

a basis for a long-term cooperation and can be seen as a glue between the partners (Li & Dant 1997: 205). In addition, it is stated that all of the channel members perceive benefits when using already established channels. For example, utilizing existing channels is less costly for the manufacturer than establishing new channels, whereas intermediaries have a larger portfolio to address the customer with and furthermore, customers can use the channels they are accustomed to buying from (Evans & King 1999). Thus, following is hypothesized:

**H1d.** Already existing multiple channels for products and services increase the probability of using multiple channels when launching new service products.

Different studies suggest that there are either complementary or supplementary relationships between variety of channel types and channel intensity decisions (Frazier 1999). The manufacturers must decide how many channel members they will have of each type. Intensity of partners can be controlled and intensity decisions determine how much competition the company allows within the chain (Palmatier et al 2015: 163 – 179). It is argued that when hybrid channels are chosen, the manufacturer is willing to control the amount of competition. According to Grönroos and Helle (2010) value has technical, monetary and perceptual dimension. Technical dimension consists of process functioning and efficiency related aspects. Monetary dimension comprises of cost savings and business growth, and perceptual dimension relates to performance perception, trust, commitment and attraction (Grönroos & Helle 2010). If the manufacturer allows too much competition within the channel, the intermediaries might lose revenues (value) due to competition. However, conflicts, meaning opposition by the channel members or dissonance within the chain, are on some level even wanted (Rosenbloom 1978). The disunity can be used to strengthen the relationship, if it is managed appropriately and it can also maximize channel performance by avoiding complacency (Palmatier et al. 2015: 350 – 351). It can be claimed that:

**H1e.** The tighter the (hybrid) channel partnerships are, the more the manufacturer will pursue to restrict intensity of distribution to avoid major channel conflicts.

In this study, relationships are seen to affect channel decisions in relation with value creation. It is hypothesized that complementary value creation facilitating activities affect multiple channel choices positively (Chung et al. 2012). All the relationships must add value to the channel network. It is also hypothesized that good relationship between intermediary and end-customer, as well as the relationship between intermediary and

manufacturer affect multiple channel choices positively (Chung et al. 2012). Manufacturer is not the only party that gains partnership advantages, as stated before, for example, intermediaries gain revenues from the products and services sold through them and customers can have enhanced service and availability (Evans & King 1999). Going further in this application it is argued that value from these channel decisions relate to multiple channel choices, but are not limited to them. Sa Vinhas et al. (2010) argued that when implementing multiple channels, they should facilitate new product introductions. These new products can create value by increasing margins for intermediaries and enhancing product performance for customers (Sa Vinhas et al. 2010). Value creation within the channel relationships extends to types of channels, intensity and coverage decisions and standardization decisions of the international marketing strategy across the markets. All the channel decisions must create value for the channel participants. The choices must add value through complementarity and effectiveness. This discussion forms the basis for following proposition:

**H1f.** The better value creation related aspects within the channels are understood and considered the more value can be created.

### **Product-technology maturity**

The main idea of the product-technology model is to explain which channels support reaching customers the best in each life cycle phase (Krishnamoorthi 2012). The model illustrates which stages there are for product-technology in its development path (Moore 1991). According to Lele (1986) the theory proposes that when the product-technology is proprietary (in the introduction stage) it is sold to early adopters through direct sales representatives by the producer or via indirect sales force. It is explained by customers' needs for heavy support related to this product-technology. At the growth stage, dual channel is seen as a feasible solution to serve more customers. Further development of product-technology into a mature stage and reaching the late majority of the market, multiple channels are used (Lele 1986). Here the decline stage is not handled as the researcher expects these technologies to be still in the earlier development phases. Thus, following hypotheses were formulated:

**H2a.** Product-technology maturity affects distribution decisions by the service product being either directly or indirectly distributed through sales force when the service product is in introduction stage.

**H2b.** On growth stage dual channels are utilized.

**H2c.** When the service product gains greater maturity, multiple channels, different types and higher intensity in distribution can be realized.

Hollensen (2007: 508) states that product characteristics affect the suitability for Internet sales: it depends on if they are physical or digital, the customer segments' needs and capabilities, familiarity with the brand and website features. A special characteristic of electronic self-service is that the communication does not include human interaction, a web-based self-service portal as an example (Kumar & Telang 2012). Scherer et al. (2015) suggest that not only the characteristics of the technology should be recognized, but also the social context where it is used. The company should examine whether there is need for guidance or other support when purchasing, need for service and support after purchase as well as need for convenience and extensive availability. Also, control needs and attitudes towards online purchasing are highlighted to impact channel selection between traditional format and online (Laudon & Traver 2010: 6-16).

Product category and characteristics affect customer needs and behaviors (Hollensen 2007: 508). Gabrielsson and Gabrielsson (2011) have found that system products are more difficult to market because they have a mixture of product elements (eg, software, hardware, services and know-how) which makes them more complex by nature. Whereas, services that are digital by nature and do not involve physical elements can be easily sold via Internet, however, according to research, selling through Internet is more unlikely within the B2B companies (Gabrielsson & Gabrielsson 2011). Also, it is argued that the Internet as a channel cannot replace the traditional forms completely as sometimes it is needed to have direct contact with a sales person, but also because the buyers cannot examine the products physically in Internet environment (Rosenbloom 1999). This leads to following propositions:

**H2d.** If the service product is truly digital in nature and/or has low support needs it can be sold through Internet.

**H2e.** System product is more likely to be sold in conventional channels, as Internet has a limited capability for substituting conventional sales methods in selling complex solution.

## **Market diversity**

Increasingly, the globalizing companies must decide whether to standardize or adapt their distribution channels according to different international markets (Dimitrova & Rosenbloom 2010). Furthermore, it is speculated that foreign markets need adapting of services (Javalgi & White 2002). Market diversity is claimed to affect utilizing multiple channels to penetrate better the local markets and to serve different segments. Johanson and Vahlne (1977) have proposed that internationalization is frequently started in markets that are close to the home market. This includes psychic distance, which means factors that make it difficult to understand foreign environments. Furthermore the companies were suggested to gradually enter other markets that are more distant to them (Johanson & Vahlne 1977).

There are arguments against distribution channels strategy standardization. Factors that work as barriers against it, according to Dimitrova and Rosenbloom (2010), are culturally distant distribution behavior (cultural differences), distributive institution rigidity (economic, political, social, competitive and technical developments) and international functional fragmentation (types and sizes of intermediaries not performing same functions between countries). However, standardization enables economies of scale and scope, but also control and coordination over the marketing activities (Levitt 1983). Especially, when there are global segments that have been identified, standardization according to them comes feasible (Chung 2005). The other factors that push towards standardization are standard communication, global uniformity, consistency and image, easier planning and controlling as well as stock cost reduction and synergies (Vrontis 2003). Nevertheless, channel strategy must be considered to be adapted according to market or segment when there are differences in the culture of the distributors, market related development factors or the functions that the intermediaries perform between home and target market. Thus, it is hypothesized that:

**H3a.** Expanding to new markets increases diversity and thus the probability of utilizing multiple channels.

**H3b.** Greater market diversity leads to more adapted strategy when distributing service products.

### 3. RESEARCH METHODOLOGY, DATA COLLECTION AND ANALYSIS

In this section methodological choices are explained and discussed. The section is highly important as the planning phase affects implementation and results of the study. Research design decides the logic which is used to collect data for examining research questions and further linking it to results (Yin 2003: 19). The research is a multiple case study that utilizes abductive approach. Multiple case study was chosen for its ability to produce deep understanding and generalization. After research methodologies, interviewing as the main data collection method is presented and analysis of empirical data are introduced. Furthermore, the validity and reliability related considerations are described at the end.

#### 3.1 Research methodology

Granot, Bashear and Motta (2012) explain that in each research the research problem must determine the methodology adopted, not vice versa. In this thesis the research strategy is case study. The strategy was chosen because the intention is to research a real-life contemporary phenomenon by researching ‘why’ and ‘how’ the events occur (Maylor & Blackmon 2005: 220). A case study is chosen for its ability to produce deep understanding of distribution decisions and factors affecting them. These kinds of questions are used to reveal operational links in time, rather than frequencies. It also focuses on behavioral events on which the researcher does not have or has only little control (Yin 2003: 5-9). Especially because Yin (2003: 14 – 15) states that the strength of a case study is to combine logics of design, data collection methods and approaches to analysis, so case study can be seen as a comprehensive strategy. It was considered to be important to produce broader view about the studied topic. The remote condition monitoring services are relatively new in the studied industries, so deep understanding of factors related to distribution decisions in certain context and development of the strategies are considered to be best studied through how and why questions that are characteristic for case studies.

The main aim of case study as a research strategy is that it tries to find the decision or set of decisions and to investigate why the decisions were made and how they were implemented (Yin 2003: 12). In this study the service product distribution strategy decisions are examined: how distribution channels are organized and developed, what factors affect distribution as well as why and how the factors affect distribution strategies.



The strategy is especially feasible when the researcher wants to examine the phenomenon in a context that is thought to have an effect on the studied phenomenon (Yin 2003: 13). Furthermore, separating the context and the phenomenon is not necessarily easy (Yin 2003: 14). The researcher wanted to examine the effects of context, as this kind of service products are quite new for the studied case companies and industries, so case study was considered the most appropriate strategy.

Nevertheless, single case studies are considered to have weaknesses in producing generalization and thus the researcher wanted to conduct a multiple case study. Multiple-case studies are considered to have stronger implications and even two cases are usually better than single cases to enhance the quality (Yin 2003: 19). To ensure comparability of the multi-case study, a more structured approach for the research is needed (Bryman & Bell 2007: 480). The researcher pursued structured approach by providing the interviewees with cover letter that introduced the topic (Appendix 1.), interview guide for interviewees that communicated the handled topics (Appendix 2.), information about needed interview time and glossary of the terms that are used during the interviews (see Appendix 3.) before each interview. Structured approach was also pursued by creating an interview guide for the interviewer (Appendix 4.) and utilizing it during the interviews to ensure that the data would be comparable and certain important topics would be covered.

The approach of this research is abductive. The approach was chosen, because gaining an understanding of the meanings and research context was important (Norrgrann 2014). The research was built on a trace of empirical interest first and then examining existing theory further, after which proceeding to empirical examination and collecting qualitative data. The research tests and develops theory by using earlier studies and theory as a basis, but also tries to produce new information about the phenomenon (Malhotra 2010: 73 – 74). The literature was examined to develop focused and insightful questions about the distribution channels, but not to have the answers predefined. Using theory is the key to the design, data collection and finally generalization of the gained results (Yin 2003: 33). This was pursued through extensive examination of relevant, existing theory and using that for deciding focus and to design how to conduct the research. The researcher started the thesis process by examining interesting ideas and identifying research focus in cooperation with the sponsor of this thesis gathering insights ‘from the field’. Preliminary literature review was conducted and possible research gaps identified. When the topic was clear, the research questions and objectives were decided. Based on the literature, a framework with hypotheses was developed to narrow the topic, direct data collection and support analysis.

According to Yin (2003: 33) the mode of generalization in case studies should be considered as analytic generalization where the previously developed theory is used to compare the empirical results of the case study, and if two or more cases show support for the theory, replication can be claimed to happen. Yin (2003:47 – 48) states that for case selection, the rich theoretical framework is especially important as it has to set the context in which the phenomenon is expected to happen (literal replication) and when not (theoretical replication). It is recommended that 2 – 3 cases would predict literal replication and couple of other cases to pursue different pattern in theoretical replication logic. This research pursues to replicate the four chosen cases literally to enable rich data and solid results. It is proposed that value in relationships (all have intermediaries), product-technology maturity and market diversity have effect on distribution. If the setting is supported by the findings, the results would confirm the initial propositions, if there is contradiction, the original hypotheses are re-formulated and tested.

Yin (2003: 51) suggests that when deciding the number of cases, it is important to consider the complexity and external validity. When external conditions are considered to produce variation between the cases, bigger number of cases must be considered and the researcher must reflect on how solid multiple-case result he or she wants. Two to three literal replication cases are sufficient for situation where rival theories are fairly different and the issue does not require substantial certainty (Yin 2003: 51). Literal replication gives not only more solid results, but also, if the context between these cases varies and the results still replicate, they will have expanded external generalizability (Yin 2003: 53). Each of the cases were analyzed individually to demonstrate how and why propositions were matched and each case's results are examined if it can be replicated in other selected cases. When doing the cross-case comparison, it is explained how broadly replication logic applied and why the results were predicted to exist and why other cases might have predicted to have contradicting results. Yin (2003: 50) states that when something significant is found during the research, such as non-replicating case, the research design might have to be considered again and theoretical framework redesigned or alternative case chosen.

This case study tried to produce comparative results and to explain the phenomenon being researched. The goal was to gain broad generalization based on gathered evidence. Examining non-competitive companies offering service products in high technology industries gives the researcher the opportunity to compare the results between the companies. This also enables the researcher to see what kind of contingencies affect the process and decisions in different companies, which is also suggested by Norrgrann

(2014). Thus four different cases were chosen in pursuit of literal replication. The decision was made to keep the data manageable and suitable for a master's student. It is also justified as there is limited amount of previous literature in this context (Norrgrann 2014). The criteria for the companies chosen was to have remote condition monitoring service product, distribution through intermediaries (not necessarily for the service product) and to have B2B as their main target market, the companies were also expected to conduct international business. Within each case there were one or two individual people identified with required knowledge about distribution decisions.

Yin (2003: 21) implies that there are certain elements that should be included in a case study research design. These are research questions (in case study how and why questions), propositions (statements that force the researcher to focus and narrow what is studied), units of analysis (what a case is; individual or entity), the logic that links the data to propositions (for example, pattern matching) and the criteria for interpreting the findings (sufficient logic in interpretation) (Yin 2003: 22 – 27). Theory development before the actual data collection is of great importance in case studies as the researcher has to have an understanding of the studied subject / theory before starting on the field (Yin 2003: 28). The propositions that were built after theoretical review and research question formulation. They were used also to guide the interviews and in analyzing phase and helped in pattern matching as well as cross-case synthesis. This was done to enhance the external and internal validity of the thesis. Individual cases were analyzed separately with the help of tables categorizing data, they were also used to collect data into comparable form, to categorize it and further analyze it.

### 3.2 Data collection

Case study can combine quantitative and qualitative evidence, or just one kind. It can also investigate various kinds of data, not only direct and detailed observations (Yin 2003: 14 – 15). Within marketing it is seen that qualitative methods enable deeper understanding of behavior than quantitative methods would as it is an applied discipline (Granot et al. 2012). The aim was to study the research problem in depth and provide new knowledge about the subject, so qualitative methods were most suitable option for the data collection. Data triangulation was used to improve the reliability and check validity of the research as suggested also by Bryman and Bell (2007: 412 – 413). Data triangulation means that multiple sources for data gathering are used for further evidence (Norrgrann 2014). Primary data were collected from in-depth semi-structured interviews by interviewing

people that are planning and coordinating distribution channel decisions, not only were the directors with the strategic power, but also other managerial personnel participating in implementation process interviewed to have more holistic view about the whole process. Interviews are especially valuable for producing rich data and descriptions (Woodside & Wilson 2003). To understand the deeper meaning also the context has to be understood (Granot et al. 2012). Thus also business and market related questions were asked.

Interviews involve some strengths and weaknesses. The main strengths are that the interviews are very much targeted and focused on the topic of research and they provide insights to the causal inferences (Yin 2003: 86). In-depth interviews enable deeper understanding of processes, structures and issues that come up in the discussions and provides a view to the complexities and difficulties in change (Granot et al. 2012). The weaknesses are possible bias that occurs because of poorly formed questions, response bias, and the interviewee might have poor recall on some studied matters. Also, reflexivity, meaning that the interviewee tells what the interviewer wants to hear is a possible weakness (Yin 2003: 86). To enable in-depth discussion, two hours was reserved for each interview and to reduce biases the same topic was covered from different perspectives and mainly through open questions, but also by having two key informant for the same case when possible.

The interviewees were allowed to review meeting transcriptions to ensure that the respondents have been understood correctly, this also allows to make corrections if needed. This is called respondent validation and is recommended by Bryman and Bell (2007: 411 – 412). When allowing respondent validation, control and censorship issues may have to be considered (Bryman & Bell 2007: 411 – 412). The researcher was prepared to report possible control and censorship issues, but enabling anonymity for the interviewees reduced issues. Maylor and Blackmon (2015: 227) state that researcher depends on the goodwill of interviewees and the practicalities, such as, informing the topics, duration and preparing to reward the companies for participation should be considered. Cover letters requesting for interview (see Appendix 1.) were sent to interviewee candidates. The purpose, duration and hoped outcomes were introduced in the cover letter sent to the participants. Furthermore, the actual interview schedules were agreed through e-mail or phone call. Interviews were conducted either face-to-face or through a teleconference meeting.

The aim of this research was to interview the participants individually, with two representatives from each company. The researcher prepared for not having all the answers from the interviews and answer incompleteness by asking for permission to be contacted later during the thesis process. Also the number of attendees was decided based on completeness of the answers as suggested by Maylor and Blackmon (2005: 227). The time of the interviews was limited to two hours by reserving the time slots with the interviewees. The reserved two hours included all the preparations, introductions and such. The estimated time for the actual interview was one and a half hours allowing the interviewer to help sharpen skills and for the participant it to be acceptable time spent, as instructed by Granot et al. (2012). Also, it helped to maintain the amount of analyzed data manageable (Seidman 1998).

The interview guide for interviewees (see Appendix 2.) was offered before interviews to interested readers to enhance dependability of the research. The questions of the interview guide for interviewer (see Appendix 4.) were designed the nature of qualitative research in mind, meaning that they are not limited to the topics mentioned, but are flexible enough to go forward with emerging themes and going deeper into the subjects that are puzzling and of great interest (Bryman & Bell 2007: 482). The interview guide was prepared according to instructions of Bryman and Bell (2007: 483). The researcher had prepared: (1) approximate order of questions, (2) formulated questions to be able to answer research question, but not too specific, (3) understandable and relevant language to people interviewed was pursued, (4) leading questions were tried to be avoided, (5) “facesheet” information with name, age and gender and specific kind with position in company, number of years employed and others to contextualize answers (Bryman and Bell 2007: 483).

The researcher prepared for the interviews by having one “pilot study”, which is not used for the thesis report. Also she familiarized with good qualities of a researcher and types of questions that can be used during the interviews. According to Bryman and Bell (2007: 486) the interview should contain different kinds of questions, according to the situation and the researcher should be alert and interpret the interviewee and situation at all times. Kvale (1996: 133 – 135) has indicated nine types of questions. The kinds of questions include: introducing questions (Please tell me about your service product?), follow-up questions (Could you tell me more?), probing questions (Do you have more examples similar to this?), specifying questions (What did you consider?), direct questions (Are you happy with your distribution setting?), silence (as a means of tension), indirect questions (What do people in the company think about the way the products are distributed?),

structuring questions (Is it okay to move on to a different topic?) and interpreting questions (Can you say that you have considered customer needs when you planned the distribution?) (Kvale 1996: 133 – 135). At the end, the interviewees are given a possibility to comment if the topic has been fully covered and raise issues that have been overlooked as suggested by Bryman and Bell (2007: 487). Most of the above mentioned types were used frequently as it was pursued to start with a more open questions and then start going to a deeper level in conversation and finally verifying what has been said, although, indirect questions and silence were not used as much. The interviews were recorded and transcribed, so that they could be sent to the interviewees for validation, but also to make analyzing easier and more reliable.

### 3.3 Data analysis

There are three strategies that can be considered when analyzing case study evidence: theoretical propositions, setting up a framework based on rival explanations and developing case descriptions (Yin 2003: 109). The most preferred one is theoretical proposition based strategy and it was also used in this study. In this strategy, original objectives and design are based on the set propositions (Yin 2003: 111 – 112). Theoretical review formed the basis for theoretical framework and propositions. Interview data was then used to test the formulated hypotheses. Descriptive strategy is less recommended, but can help in getting further in the research analysis. For example, chain of decisions can be described and thus explained in a causal way (Yin 2003: 114 – 115). This strategy was also used in the research to describe the development of channel strategies.

These strategies are realized with techniques, such as, pattern matching, explanation building, time-series analysis, logic models and cross-case synthesis (Yin 2003: 109). The researcher can manipulate the data for better and faster analysis by grouping it or organizing differently, categorizing and placing the data in a matrix, displaying data in charts and graphs for examination, tabulating frequency and investigating the complexity and relationships for example, by calculating means or placing the data on time line; these techniques are used especially to enhance internal and external validity (Yin 2003: 111, 115) and were used also in this research as first the interview data was organized and grouped to find categories and patterns between the cases. Pattern matching is one of the five techniques; it pursues to compare predicted alternatives with empirical patterns. If they are matching, it proposes stronger internal validity (Yin 2003: 116). As stated before, expected patterns (hypotheses) were compared with the interview data to produce results.

Explanation building is a special type of pattern matching and it is an iterative process from first building hypotheses and revising them after each case, even several times (Yin 2003: 120 – 122). In this study preliminary propositions were tested during pilot interviews and changed accordingly. Furthermore, during analysis hypotheses were refined through theoretical reflections when it was evident that they needed to be modified.

Time series, such as, placing events in chronological order serves to build rich analysis. It can be used to make sequences, map contingencies, intervals and time periods. It aims to seek how and why events relate to each other and the possible causality implications (Yin 2003: 125 – 126). It is claimed that relationships and networks should be researched related to their development through exploring continual, deep patterns of actions and interactions over time (Easton & Araujo 1994). In this research the time patterns were used to test theoretical propositions, especially because product-technology maturity was one of the main theoretical approaches. With logic models researcher can stipulate complex chains of events and it tries to match empirically observed events with theoretically predicted ones (Yin 2003: 127). The research aimed at dialogue between existing theory and research data. The data was reduced and categorized to get it into a comparable form and finally, the conclusions were drawn as suggested by Malhotra (2010: 198). Cross-case synthesis can be pursued, for example, by building a data table for individual cases in order to have consistent framework that enables cross-case conclusions (Yin 2003: 134). With the help of these tables similarities and types emerged and were further analyzed. The researcher conducted synthesis after analyzing each case separately and utilized tables that had categorized the collected data to produce generalization.

Yin (2003: 137) suggests that high quality research can be established by showing that all possible evidence is used and been looked for, also, addressing major rival interpretations or suggesting further research for loose ends. Thus, the most important aspects in this research are pursued to be clearly communicated to highlight the importance and focus. In addition, it pursues demonstrating the researcher's expertise in the topic by presenting recent articles and discussions. Furthermore, the researcher has introduced some areas for future research that are needed to be investigated to further validate the results of this research.

### 3.4 Validity and reliability of the research

It is necessary to consider four different aspects of quality which are: construct validity, internal validity, external validity and reliability (Yin 2003: 19). There are common tests that can be used to research the quality of the empirical social studies, which include case studies. These tests and their relation to current study are presented below (see **Table 1.**)

**Table 1.** Case study tactics for four design tests. Adopted from Yin (2003: 34).

Tests	Case study tactic	Phase of research
Construct validity	<ul style="list-style-type: none"> <li>- Multiple sources of evidence</li> <li>- Establish chain of evidence</li> <li>- Key informants review report</li> </ul>	Data collection Data collection Composition
Internal validity	<ul style="list-style-type: none"> <li>- Do pattern matching</li> <li>- Do explanation-building</li> <li>- Address rival explanations</li> <li>- Use logic models</li> </ul>	Data analysis Data analysis Data analysis Data analysis
External validity	<ul style="list-style-type: none"> <li>- Use theory in single-case studies</li> <li>- Use replication logic in multiple-case studies</li> </ul>	Research design Research design
Reliability	<ul style="list-style-type: none"> <li>- Use case study protocol</li> <li>- Develop case study database</li> </ul>	Data collection Data collection

There are ways to improve *construct validity*. One principle is to use multiple sources of evidence, which means that the researcher can use different triangulation methods (Yin 2003: 97). Triangulation of data sources, such as, interviews, archival records and documents can be used together to make a case study more convincing. Also, investigator triangulation by using different evaluators, theory triangulation to have different perspectives on the same data and methodological triangulation can be used (Yin 2003: 98 – 99). In this research *multiple sources of evidence* was used as data triangulation in the form of interviews and available information on case company websites is used. Furthermore, thesis supervisor and especially supervisor in the sponsor company provide investigator triangulation. Also, three different theories are used to examine the research problem. Maintaining a chain of evidence is an important aspect in enhancing the validity of the research (Yin 2003: 105 – 106). The *chain of evidence* is pursued by describing all the phases in detail and supporting analysis with quotes and other material. The interviews were recorded and the transcriptions as well as the preliminary analyses were made available to the interviewees after each interview to validate the discussed topics and analyses. Thus respondent validation happened as the *key informants* (interviewees) were



asked for comments, and so allowing them an opportunity to correct, add or remove some statements before the report was published.

For the *internal validity* following aspects were considered. The propositions that were built in the beginning were tested during the analysis and the data were used to do *pattern matching*, comparing the results of the research to the theoretical base. Also cross-case synthesis was done at the end after analyzing single cases. *Explanation building* was done when the first hypotheses were tested and reformulated after pilot interviews. Furthermore, the researcher pursued discussion between the collected data and theory, so that explanation could be built to understand why and how certain aspects affect distribution strategies for the studied service products. Through utilizing existing research and *logic models* the researcher pursued to understand and recognize chains of events and tried to match empirically observed events with theoretically predicted ones. Individual cases were analyzed separately with the help of tables created for this purpose and further compiled into matrixes that were used to collect data into comparable form, to categorize it and further analyze it.

For *external validity*, the use of replication logic in multiple-case studies is recommended (Yin 2003: 34). This was done to enhance the external validity of the thesis. In this study four different cases are chosen in pursuit of literal replication. The criteria for the companies chosen was to have remote condition monitoring service product, distribution through intermediaries (not necessarily for the service product) and to have B2B as their main target market, the companies were also supposed to be international or global. The cases were supposed to replicate with respect to the suggested proposition according to value in relationships, product-technology maturity and market diversity.

*Reliability* was considered by using case study protocol and developing case study database. The chain of evidence has to be clear and transparent from the case study questions to case study protocol, to citations of evidence in the case study database and to the case study report (Yin 2003: 105 – 106). *Case study protocol* including key informant contact procedures, information about their background and anonymity, interview guide and participant data are described in this chapter. Invitations, interview guide and agenda as well as collected participant data are attached as appendices. Also, a *case study database* was constructed for later access to case study notes, narratives, documents and tabular materials (Yin 2003: 102 – 103). The researcher collected all the gathered information in a network drive, where the material can be accessed later on, but the researcher also included most relevant material as appendices in the research report.

#### 4. CASE ANALYSES

This section presents the data and analyzes it. The section presents the analysis first case by case and then moving to cross-case synthesis. The individual case analyses describe the international distribution channels and their evolution within them in more detail, trying to examine what kind of decisions there are and how and why the decisions have been made. First the introduction stage channels are described, then the growth stage (current strategy) development aspects are discussed and finally, the future of the channels are discussed. After individual case analyses, the cross-case synthesis compares the results of the individual cases. Also there, the different stages of channel development are compared. The case companies are presented by using pseudonyms to protect anonymity of companies. However, some figures and facts are presented to provide background information and to illustrate the context the companies are operating in (see **Table 2.**). There are three companies of which one case company had two different cases to analyze (cases A and B). Thus, the cases are presented with both business unit and group figures. These business units do not make decisions in cooperation and neither has there been any benchmarking between units when making decision regarding the studied service products. They also produce different products and serve different markets. All of the case companies are operating in international/global scale and they provide both products and services for the end-customers. The participating companies' headquarters are located either in the US or Europe.

**Table 2.** Case company background details. Source: companies' Internet pages.

Case	Employees / Revenues	Markets	Products	Services
Case A	Business unit: 5 500 employees / Division: 10 billion dollars (2014)  (*Group: 140 000 employees/ 39,8 billion dollars in 2014)	Business Unit: Sales and service in 53 countries / Automotive and general industries  (**Group: Presence in 100 countries; utilities, industry and transport & infrastructure)	Automation products, application equipment and software	Responsive service, advanced services, partnerships

Case B	Business unit: 17 000 employees / 5 billion dollars (2014) (*)	Global capabilities in 75 countries / Utility, industrial and commercial customers (**)	Power, distribution, traction and special purpose products and components	Responsive service, advanced services, partnerships
Case C	More than 15 000 employees / 4,9 billion dollars (2014)	Employees in 50 and customers in more than 70 countries / Power, oil, gas, chemical and other industries	Flow management products and spare parts	Condition monitoring systems, service and maintenance, repairs
Case D	About 10 000 employees / 2,5 billion dollars (2014)	Sales and support in 80 countries and over 20 manufacturing plants across the world / All industries with welding and cutting process and applications	Welding and cutting equipment, spare parts and consumables	Preventive maintenance programs, repairs and training

#### 4.1 Individual case analyses

To present a comprehensive view about all the studied cases, citations, tables and other data are presented for each unit of analysis. This is accompanied with detailed analysis of distribution channels and factors affecting the decisions. In addition to the multichannel, channel type, intensity and coverage as well as standardizations decisions, the service product characteristics and goals related to it are described to set the context. The channel strategy related aspects from introduction stage, to growth and until future channels are described. Introduction and growth stage are covered more broadly as there is more concrete information available. It has to be noticed that all of the decisions do not change, so considering this, mainly changing aspects are covered for space economy. The analysis pursues to discuss the studied cases with theoretical references and reflecting the findings on literature. Quotes from the interviews are marked with *italics* and interviewee is indicated with a number (X) according to numbering in interview participant data table (see Appendix 5.). Also, tables were used for preliminary individual analyses (see Appendix 6).

#### 4.1.1 Case A: Automation

The service product is suitable for remote condition monitoring and customers can access the service in the Internet. It has been on the market for several years, but the expansion has been gradual. However, market maturity is increasing and they have to prepare for greater market demand: *“I think we are on the border line. I think we could be close to a break through”*. (1) The service is always made available through a service agreement. Most of the customers who are smaller companies with limited skills select a service agreement where the manufacturer (case A) takes care for the products when they are running the production. This is not only remote condition monitoring but other service as well and there is a need to offer local service to serve market diversity. The company wants to sell the service as a part of a service agreement as they want to have a close relationship with the customer. This service is a supporting tool for service people, which can be used by all of the channel members – the manufacturer, intermediary and customer – to create value together. The manufacturer sees the service business building on relationships and trust, and they are especially important regarding this kind of service. However, to penetrate the self-maintaining segment, the manufacturer has to develop their service platform to offer the customers a deeper access to the data, which can be sold separately on the portal. The company is still considering how and whether to use external parties for services as the business is growing. Demand on the markets for this product-technology have affected the coverage, but further penetration is pursued, especially through integrating the service component in new core products.

##### 4.1.1.1 Introduction stage strategy

In **Table 3**, the main aspects of case A introduction stage distribution channel strategy are presented. Distribution was handled through company-owned direct channels and no intermediaries were used to distribute this service product. Overall, partners were used only for product distribution, not for selling the service product. Also, service for the core products they are selling was conducted by either the manufacturer, some other service providers or the customer, without dividing activities between the members. The distribution channel type was company's own sales force. Internet site was used for distributing brochures and other information. The service was delivered through an Internet portal, and it could be accessed with all devices, PCs, smartphones and tablets. They had an exclusive distribution as they were the only one provide remote condition monitoring service for their products and even within direct channels offering was limited. The service product was stated to be sold globally, but Europe and the US were the biggest

markets – the regular customer being a small or mid-sized customer, having around 20 products suitable for the service in their facilities. In introduction stage the channels were standardized, but they pursued offering the service locally or at least regionally and the portal already had different language options.

**Table 3.** Case A: Introduction stage decisions.

Service product	Remote condition monitoring (linked to service agreement)
Multichannel decisions	Single channel distribution strategy: - Direct distribution through company's own channels
Activities divided in channel	- Partners and integrators used only in product business - Customer can choose service agreement where they hand over the product care for the manufacturer
Channel types	- Direct sales using own sales force (service sales) - E-service through Internet portal; can be accessed on PC, smartphone, and tablet - Internet site for brochures and information
Intensity / coverage	- Only company owned channels, no restrictions - Most sales in Europe and US (Generally small and mid-size customers up to ca. 20 products, but also some large customers)
Standardization	Standardized distribution - Pursuing to offer local or at least regional service - Different languages options in the portal

**Service product:** In order to provide remote condition monitoring service, an enabling component had to be installed to the core product. This was done in factory for new products or in the installed base as a 'retrofit' installation. In introduction stage there were no core products with integrated service component sold. It is stated that it related to the service product characteristics, long-term relationship where companies rely on each other and trust each other is important for customers. It is stated that service is still "A people or relationship business, because service is little bit always about trusting". (1) Trust and commitment are seen to develop with the help of personal communication (Gabrielsson & Gabrielsson 2011). Trust is so important because preventative maintenance is conducted before something breaks, so the customer has to trust that the supplier is not selling a spare part just to gain profits, but for a real need. It was stated to be an enabling tool for the case company to gain a mid- or long-term agreement with the

customers. As stated before, the company wants to sell it as a part of service agreement as they: *“Would like to have a long-term agreement [...] would really like to have a close relationship with our customer”*. (1)

**Multichannel decisions:** The remote service component could be ordered when purchasing new core products or it was sold separately to old products. In both of these cases a service agreement had to be signed to start utilizing the service. For all of these activities, the company used direct, company-owned channels. Kabadayi, Eygboğlu & Thomas (2007) state that multiple channel systems have better outcomes when the channel partners' business strategies are aligned, which is also clear in this case. The standard remote monitoring service was not of interest to the partners and that is why only direct channels were used. The partners and integrators were not interested in distributing this service product, because the service product was a feature to monitor the product on production, whereas, when the installation is finalized, they are normally not involved in the production, and the service will be conducted by the customer or a service provider.

As stated before, partners were used only for product distribution, not for selling the service product. Overall, the service was conducted by the manufacturer, some other service providers or the customer, without dividing activities between the members. Most of the case company's partners did not offer service for the core products and were not interested in selling the service product, so selling it to end-customers was considered acceptable and the manufacturer not bypassing them. The case company stated: *“So it's not like we would be fishing in their sea, so to say.”* (1) The case company also mentioned that they did not necessarily know where the partners ship the products. To obtain information about the location and the use of their products, it is vital to have a contact with the end-customer. Direct contact and registration of the product helps in this.

**Channel type:** The service product was always sold with a service agreement, which was stated to be better sold through conventional channels (non-Internet based) as people are important in proposing value during the sales process. The sales people *“Talk with the customer and then they create a service agreement and then remote or the supporting tool for the service agreement.”* (1) Also literature suggests that personal service channels increase trust, allow customization and close relationship between the customer and the service provider (Barnes 1997). Especially, in case of preventative maintenance and remote access, long-term relationship where companies rely on each other and have mutual trust was considered important. It was stated that the service people should be close to the customers and in the best scenario have a personal relationship.

The manufacturer must also make decisions on which platforms to distribute the service. Mobile applications represent the most recent service innovations, but also browser-based service portals persist (Lindberg-Repo & Dube 2014: 104). The case company did not use Internet sales, but the service portal was available online to enable remote access. The service portal was accessed through browser and could be used on PC and mobile devices. The HTML5 coding enabled access through smartphones and tablets for convenience in remote use. It is suggested that in business-to-business context companies are especially concerned especially on data privacy (Jha & M.C. 2015). Also, the case company stated that the service product requires data sharing, so concerns must always be discussed with the customer. Safety of the platform and protection of the data must be ensured and agreement on the data usage has to be signed. The data can reveal much about the production when these products are monitored. It was also stated that, as the production data must be shared, the service has to have a high value for the customers. For these purposes, direct sales force was important in supporting the process by enabling personal discussions.

It was stated that the data can provide several benefits for the manufacturer. Data about product usage provides information how the products function, which can be a great benefit in generating services and products for the target group. The customer value proposal for the online service was presented as failure prediction for condition based maintenance, easiness to see the fleet of products within the service agreement and track how they work. The value of the service agreement was to combine both acquiring the data and alarms of predicted fault through remote condition monitoring, but also solving the problem. Lindberg-Repo & Dube (2014: 118) have also stated that real-time data should be translated into true added value. In this case, the customer can benefit from faster problem solving as well as better availability of the core products. In addition, the manufacturer wanted to sell consultancy services in order to improve the performance of the system: *“If you see there is certain error occurring ten times a day, then you can investigate and also ask us. And to ask what we can do to avoid this and this is one of the benefits of course”*. (1)

***Intensity and coverage:*** The company was distributing the service product exclusively by utilizing the company’s own channels. This kind of a service product that includes hardware and software application that requires system integration skills affects distribution decisions (Gabrielsson et al. 2002). It was specified that the hardware was sold technically everywhere, including the service enabling component, global contracts and the data, but installation and commissioning was difficult in some regions as the

company's service organization was not large enough and did not have enough skilled people to offer the service. So, in introduction stage it was evident that the product-technology newness did not allow more intensive distribution.

Most of the sales were in Europe and the US. In these regions the small and mid-size companies valued the service, because they did not have skilled people in their maintenance team. Also, in those regions, there were skilled people who could support data analytics and handle service. However, the larger customer that were a big part of their target market were more difficult to penetrate as they do not see the need for remote services, because they handle maintenance on their own. It is claimed that competition can hinder introducing new products and services and can make market entry more difficult (Walters 1986). However, there was no competition regarding monitoring of the company's own products, because the other manufacturers do not have access to the data. There was, though, competition in other 'access and connectivity' solutions in the market and between the core products. So it can be stated that market characteristics, product-technology maturity and ability of the resources to create value affected intensity and coverage of the distribution channel strategy.

**Standardization:** The company had not adapted its distribution strategy. It is stated, though, that considering different languages was important as the platform is mainly targeted at maintenance people. It was mentioned that if the end-users are not familiar with English, then they are not comfortable in using the service. Ulaga and Eggert (2006) claim that value in business markets follow the benefits personal interaction. It was also stated by the case company that being close to the customer was important: *“It is important that they [service people] are close to the customer and in the best case they know each other. Because what the people on the phone do, is that they recommend maybe a service intervention or discuss with the customer the next step.” (1)*

#### 4.1.1.2 Growth stage strategy

In the growth stage the company is further developing the distribution and service product offering (see **Table 4.**). It aims to serve the customers through hybrid distribution, by utilizing their own sales force and their value providers (intermediaries). They pursue channel cooperation through enhanced offering for intermediaries in the form of common support platform. The service component is, furthermore, integrated to all new products, so installing and selling the service product is easier, as it does not have to be sold separately when the end-customer is buying the core product. The company has a



selective distribution through selected value providers and their own channels and is aiming at increasing the coverage. Distribution remains mainly standardized.

**Table 4.** Case A: Growth stage decisions.

Service product	Remote condition monitoring <ul style="list-style-type: none"> <li>- Part of service agreement to end-customers</li> <li>- Package for partners</li> <li>- Integrated service component and separate version</li> </ul>
Multichannel decisions	Hybrid multichannel distribution: <ul style="list-style-type: none"> <li>- Direct distribution through company's own channels</li> <li>- Indirect distribution through value providers</li> </ul>
Activities divided in channel	<ul style="list-style-type: none"> <li>- Customer can choose service agreement where they hand over the product care for the manufacturer</li> <li>- Partners and integrators used in product business</li> <li>- Additionally supporting each other through the common support platform</li> </ul>
Channel types	<ul style="list-style-type: none"> <li>- Direct sales through own sales force (service sales and product sales)</li> <li>- Indirect sales through value providers' sales force</li> <li>- E-service through browser can be accessed with all devices</li> <li>- Internet site for brochures and information</li> </ul>
Intensity / coverage	<ul style="list-style-type: none"> <li>- Selective value provider distribution</li> <li>- Increasing coverage on all markets</li> </ul>
Standardization	Standardized distribution <ul style="list-style-type: none"> <li>- Service needs to be local or at least regional</li> <li>- Different languages in the portal</li> </ul>

**Service product:** The company aims at using the service portal as a common support platform, which is an incentive for the intermediaries to sell and promote the service product. The intermediaries are provided with a platform for remote access to conduct fast service intervention. They can access the product, do commissioning and configuration of the system remotely. The manufacturer can support the intermediary whenever they have problems during commissioning or configuration, who can log on to the same platform. They can also directly support the end-customer if they have a problem. It is offered for a license fee to the intermediaries and as a part of a service agreement to the customers as previously. It is also stated that the component that enables the remote service is integrated into the new core products and the goal is to have all of them connected in the future. They are also creating more service agreement packages, which consist of, for example, once a year preventive maintenance and specific response times.

**Multiple channels:** In the growth stage the service product is sold through both direct sales and indirect distribution intermediaries. According to Mols (2002) multiple channels are deployed to increase sales volume, to handle large number of transactions and for managing external uncertainty. The manufacturer also states it has a big growth potential with the remote condition monitoring service as they now have approximately eight percentage of the installed base connected to it and the installed base continues to grow. They considered indirect sales as they had an extensive distributor network for the product sales. The manufacturer wanted to get the service product installed and sold also by the intermediaries. Then they planned to use a hybrid distribution structure to support end-customers in cooperation as it also seems to be appreciated that the company has a common support platform to support the customers. However, they stated that the standard remote condition monitoring was not interesting to the intermediaries. This is why they thought about creating a package for their partners who can utilize the portal to offer fast, responsive service: *“This is an idea for the partners, but then it’s not about monitoring and condition based maintenance, but for commissioning and all these things.”* (1) As stated by Kotler and Keller (2012: 457) integrated marketing channel system (hybrid channel) benefits are increased market coverage, lower channel cost to reach all the customer with differentiated effort and customized selling. This was also what the case company is pursuing with the growth stage channel decision.

**Channel types:** As service is ‘people business’, the channel types continue to be the sales force. The manufacturer is trying to gain more sales in their own product sales channel in addition to currently used service sales channel. Selling the service through manufacturer’s product sales in cooperation with service sales allows selling the service product as differentiator and additional valuable feature, with the core product when it is sold. It is also stated that additional features and advantages help selling the commoditized core product and it can be highlighted to decrease the total cost of ownership. Kotler and Keller (2012: 348) have also claimed that competition happens often on the augmented product level, consisting of additional features, attributes, benefits or services that help to differentiate from competition, not on the core benefit level.

The intermediaries are pursued to be used for distribution. They benefit from the service portal by gaining remote access for the time they are responsible for the installation. With this service they can save time and money by connecting with the products remotely. Promoting the service can be done also by intermediaries as their interest is to have good support for their installation to add value for the customer. The support is stated to be part of the feedback they will get for the products sold through them. After the installation,

the manufacturer can use the same platform to make a service agreement with the end-customer for remote condition monitoring. So, it can be stated that the manufacturer wants to use the partners to do installation and commissioning and use the service product later on for the service business. The data is seen highly valuable in creating stronger value propositions and faster support for all of the channel members. With the platform the partner, manufacturer and end-customer can all support each other and create value. In this channel system we can see the manufacturer, intermediaries and customers forming a triangle of value creation as stated by Vargo and Lusch (2008). Offering this kind of common support platform has given the manufacturer a good feedback and they pursue cooperation. *“I illustrate it with a kind of a triangle. We got our [...] our partner and we got our end-customer and we got us in this game and we can all support each other.” (1)*

**Intensity and coverage:** At the moment there is a lot of discussion regarding Internet of Things and it is seen to facilitate penetration of the customer base and convincing them to use the service. The manufacturer considered indirect sales as they have an extensive distributor network and because product and service business is expected to grow in the coming years. Thus, they would need partners to expand. With the help of intermediaries the manufacturer can seek greater intensity to gain economies of scope and scale in serving the customer base (Palmatier et al. 2015: 176 – 177.) Selective distribution is pursued through their value providers (intermediaries). In addition, when offering preventative maintenance, long-term relationship where companies are committed to each other is important. In this task the partners support the manufacturer in creating and maintaining the relationships, as they do not have the capabilities to serve everyone personally and locally. The service component is integrated into the new core products and the customers receive a trial period free or charge to incentivize registration. Growing the intensity and coverage is important as the data that is collected will enable the manufacturer to generate services and enhance their products and because of this they are enabling all of their new core products: *“The customer have to only connect it to the internet [...] and then the remote service is available. Because we see a huge benefit in getting access to the production or product data.” (1)*

**Standardization:** Distribution has remained mainly standardized. As stated the maturity of the service product as well as maturity of the market is continuing to grow. Still limited amount of markets are served and furthermore, the larger, self-maintaining customers are not yet reached properly. This can explain why standardization has been feasible. Although, it is stated that service must be local, and thus, they must serve end-customers locally and consider language throughout their service process.

#### 4.1.1.3 Future channel development for case A

As stated before, the manufacturer has not been able to cover its larger customers, even though they are targeted. However, the manufacturer is pursuing to extend the coverage from small and mid-size customers also to larger customers. The manufacturer aims at selling additional services to the large customer segment on the online service portal and thus increasing the coverage on the market. As stated before, they are able to handle their own maintenance and have skilled resources. Furthermore, as Scherer et al. (2015) have stated some customers enjoy more relationship creation and perceive relationship valuable and others appreciate more the self-service benefits. As a result, there would be different distribution for large and smaller customers. The others would be served online and the others personally.

This would enable customer value creation as large customers are interested in acquiring more advanced information. As a result the manufacturer would also increase coverage in the market place. To gain interest also in the large customer segment the company is planning to have analytics applications or features sold on the portal so that the customer can buy additional services that benefit them, without signing a service agreement. This is supported by the statement that the offered streams of information should be exclusive, highly and immediately valuable for the customers (Laudon & Traver 2010: 6-69). The large customers do not otherwise gain benefits from this service and the service remains difficult to sell. The manufacturer states that *“we don’t want to give access to our data of the product, but to offer them analytics, so to say as a service extra in our platform, otherwise getting access to these accounts is hard and service business might be close to none”*. (1)

The manufacturer also states that as the service and product business continues to grow it is claimed that their service organization cannot handle the increasing needs for service because the service organization cannot grow at similar pace in headcount, so they would need to use external service partners. The service partners could be used for break and fix and installations. Although, not everyone within the manufacturing company agrees that extending the service business to intermediaries is a good idea. However, it might be necessary from the resource and market coverage perspective. Due to these factors, some non-critical, low-end service tasks can be handed to the partners and the manufacturer can focus on the know-how services. This is also in line with current literature as many manufacturing companies are stated to prefer involving also third-parties in providing after purchase support for customers (Sa Vinhas et al. 2010). The question is about control.

#### 4.1.2 Case B: Power

The service product consists of remote condition monitoring enabling component and electronic service that can be accessed online on any device. The system has been available less than one year. It is stated that: “*We just launched it before the summer holidays*”. (2) The company feels that multiple channels enable them to increase sales volume, the market share and better respond to diverse customer demand. Having service products sold through various intermediaries also offer better chances to win an order. However, the intermediary companies are other OEMs that compete with the manufacturer. The relationship between the manufacturer and the OEM is thus not very close, which also reflects to distribution. Furthermore, it is stated that the product is much easier to sell than selling the subscription that they are planning to start charging for. If no local relationships with the end-customer is established, selling service for other than manufacturer’s products is difficult. The company has to sell the value to end-customer as customer’s specification is the main reason for OEMs to buy the service product and integrate it with their offering. At the moment, the value perceived by the intermediary is limited. The manufacturer is looking for ways to create more value through the electronic service and the service component is going to be integrated to all new core products. Furthermore, the product-technology would enable Internet sales, however, packaging the service and selling value is considered easier through personal sales channels.

##### 4.1.2.1 Introduction stage strategy

In **Table 5**, the main aspects of introduction stage distribution channel strategy are described. The distribution strategy seemed to be in parallel formation, using both direct and indirect channels separately. There were no activities divided in the channel of distribution. An external OEM or manufacturer’s internal channel purchased the component and integrated it to their offering. Overall in services, high-end services were usually being performed by manufacturer, and either ordered directly by the end-customers or by separate low-cost service providers, who have a service agreement with the end-customer directly, but are not able to conduct complex service tasks. The company was also selling the core products through EPC (engineering, procurement and construction) companies. The channel type was sales force, either their own product sales and service sales force or external OEM’s sales people. The e-service could be accessed through a browser on any device and connected to customer’s asset management system. Internet pages were used for offering information, but information was also offered at different events. The manufacturer was pursuing intensive distribution, and the coverage

was mainly in North America and North Europe, but also in Brazil, Switzerland and some other parts of Europe. The company had not had to adapt their distribution strategies related to this service product.

**Table 5.** Case B: Introduction stage decisions.

Service product	Remote condition monitoring
Multichannel decisions	Dual multichannel distribution: <ul style="list-style-type: none"> <li>- direct through company's own channels (new and old products)</li> <li>- indirect (new sales)</li> </ul>
Activities divided in channel	Overall in services: <ul style="list-style-type: none"> <li>- High-end services performed by manufacturer, ordered by low-cost service providers or customers</li> <li>- Products sold also through EPC (engineering, procurement and construction) companies</li> </ul>
Channel types	<ul style="list-style-type: none"> <li>- Direct sales through own sales force (product sales as a part of new products, service sales for retrofit)</li> <li>- OEM sales force (new products)</li> <li>- E-service through URL on all devices</li> <li>- Internet site for information, movies and other material, also fairs and exhibitions</li> </ul>
Intensity / coverage	<ul style="list-style-type: none"> <li>- No restrictions on intensity, except internally</li> <li>- Mainly in North America, North Europe, Switzerland and some other parts of Europe, Brazil</li> </ul>
Standardization	Standardized distribution

**Service product:** The service product consisted of a service component that could be installed at the factory or later in installed base (the old products). It was stated that this service product is simple and straightforward and not very complex to install. It is compatible also with the competitor's products and is much simpler than the previous service products they have had. On introduction stage the service was free of charge and the customers could use it after purchasing the service enabling component. The company stated that when local sales organizations have good connections with the customers, selling the service product is easier. It was claimed that some customers have different attitudes towards the manufacturer, which relates to the different backgrounds and history: *"I think it's the same for all products of our company, they don't like us if we have made a bad delivery on something else, they don't like us on other products either. It is up to if we have good references of the customer more than the products from us.*

*And also the local front end sales is very important and the good connections we have.”*  
(3)

**Multichannel decisions:** The company stated that they had distribution channels already established so they have did not have to consider them too much. This is also consistent with Luostarinen (1979) who suggests that companies have resistance for change and they prefer making decisions in which they have knowledge and earlier experience in. In indirect sales the service product was sold with new core products as a part of an external OEM's offering. Expansion through indirect channels was pursued to increase volume, market share and to respond to customer demand, as also suggested by Sa Vinhas et al. (2010). The manufacturer also wants to have presence in multiple channels, because winning a bid is then easier: *“We have a big chance to get the orders.”* (3) When direct channels were used, new core products were sold through product sales with the service product component installed at the factory, but it could also be sold to old products through service sales. OEMs sold it only integrated to new core products.

Gabrielsson et al. (2002) argued that channel relationships would explain selection among dual or hybrid channels and that dual channels suggest increased amount of possible conflicts that producer can overcome with its power within the channel. In this case, third parties that were used in service product distribution are competitors in product business, but did not have a similar solution. It can be argued that channel integration did not exist because of the competitive setting. Overall, activities were not shared within the channel. However, high-end services were usually performed by manufacturer and they were ordered by low-cost service providers or customers, who do not have the know-how to conduct more advanced service. Products were sold also through EPC (engineering, procurement and construction) companies.

**Channel type:** It is stated that close, previously established, close business relationship and trust is important with customers, it helps in conducting informal sales and makes doing business easier. Direct contact enables closer relationship (Schultze 2003) and as stated by Sheer and Chen (2004) not only exchange of information. The manufacturer also considered direct sales force the most feasible for selling complex products and packages. This is confirmed also by Scherer et al. (2015) stating that in tasks that are complex personal service channels should be used. The company also wanted to sell consulting services and solve problems, so sales force was considered to be needed to explain the functions and the benefits of the offering. The service product was sold for both new and old products to enable added value.

The used the OEM intermediaries were competitors in product business, but do not have a similar service solution. The service product was sold also through their sales force. This service product is simple, quite easy to install and works also with competitor's products, which was stated to enable sales through intermediaries. So it can be stated that product characteristics and complexity affect distribution. However, it was claimed that these external OEM factories bought the sensors only if customers specified that they wanted this service product. Thus, the demand for it had to be established on the customer's side and the manufacturer needed to convince the customer to have the service product in their specification when they order products from the third parties. It seems that there was no clear communication or understanding of value propositions for the intermediaries. Lindberg-Repo and Dube (2014: 118) state that manufacturer should have value proposition with arguments on short- and long-term benefits highlighting the strategic and tactical consequences for the end-customer. The manufacturer had to visit the customer, sell the value and explain what the difference with the competitors is – for this function sales force is very important. The company was also unsure about the value propositions for the intermediaries and stated that they could not see the value.

Internet sales was not used for sales, but customers could find promotional material on the internet. There were no Internet sales because of history and the company structure; there was no infrastructure to support it and the company would have needed sales resources to handle the electronic transactions. The service interface could be accessed via web URL, to show condition and other information which provides value to the customers. The value for the customer of the remote interface was the online information and predicting possible faults. It was also stated to be: "*A rather cheap investment to detect a probability of failure.*" (2)

***Intensity and coverage:*** It is claimed that competitors have been in the market for 15 – 20 years, so there is existing market demand for these features and the service product is welcomed by customers. Even though there were some competitors already, being a product manufacturer and having deep knowledge about the core product this service is offered for was considered as an asset. Furthermore, brand experience and brand growth can be seen as benefits of a successful electronic service implementation (Lindberg-Repo & Dube 2014: 56). In expansion, the brand name helps, as the company has a reputation of having good quality: "*So the customers are saying that finally our company has this condition monitoring system. I mean the brand name helps us a lot.*" (3) However, the industry the company is working in was stated to be one of the most conservative industries. "*Which means that first of all you have a lot of explaining to do and when we*



*talk about connection, internet connection, using computer, awareness, being able to handle web environment and login and integration with customer's own network.” (2) It can be, thus, stated that even though there had been similar solutions, the wireless product-technology was quite new and market readiness fairly low. However, the service product was suitable also for the competitors' products, and increased possibilities to pursue intensity.*

The service product was mainly sold in North America (Canada and US), Sweden, Finland, Switzerland as well as Brazil. It is stated that the markets that were entered were more mature and culturally fit for these remote condition monitoring systems than, for example, markets in the South-East Asia. The company had done market analysis, but they also had well-established sales force so they knew where the demand is. They also had strong service hubs in these areas, which exported the service product also to the neighbor countries. So, a big impact was made by the people that were interested in selling this service that are confident, knowledgeable and were able to adopt new technology. However, many sales people perceived the service product complicated and difficult to sell, which was claimed to be due to the fact that the company is traditionally a technical company, not a sales company. The service product was new for the company and thus, the company was expanding to the markets, where there was interest in selling the service. So the intensity and coverage did not increase necessarily as fast as wanted.

***Standardization:*** Distribution was standardized. English was offered as the main language. Also, it was stated that in some markets the organizations manage their own activities better than the others, which was related to the cultural proactiveness level and reflected to the sales results. Furthermore, cyber security was considered to be an issue, which differs between the markets. For example, this topic was stated to be very important in the US and the manufacturing company had to carefully consider fulfilling the requirements when distributing the service product on those specific markets. This was also why sales people are preferred to enable discussion in sales. Furthermore, the manufacturer had penetrated few markets and the process has been quite slow, so this might have had an effect on standardization decisions.

#### 4.1.2.2 Growth stage strategy

In the growth stage, the company continues to use dual distribution structure in distribution (see **Table 6**). However, they are adding new channel types. Their own sales force is used for new and old products, the OEM's and EPC's sales force sells the service

product as a part of their offering and distributors sell it in the US. The company is also considering Internet sales. Intensity of the distribution is not restricted and they are expanding to China, South-Asia and Middle East. The company is responsive to different language options and targets different markets with adapted distribution strategies, for example, they are using distributors in the US as stated earlier and using exporting to penetrate China. They also state that the market is quite mature, so they are actively looking for ways to expand and utilize multiple channels and creating demand.

**Table 6.** Case B: Growth stage decisions.

Service product	Remote condition monitoring and consultancy services <ul style="list-style-type: none"> <li>- Selling with another service product to enable complete condition monitoring solution</li> <li>- Integrated service component and separate version</li> </ul>
Multichannel decisions	Dual multichannel distribution: <ul style="list-style-type: none"> <li>- Direct through company's own channels (new and old products)</li> <li>- Indirect (new sales)</li> </ul>
Activities divided in channel	Overall in services: <ul style="list-style-type: none"> <li>- High-end services performed by manufacturer, ordered by low-cost service providers or customers</li> <li>- Products sold also through EPC (engineering, procurement and construction) companies</li> </ul>
Channel types	<ul style="list-style-type: none"> <li>- Direct sales through own sales force (product sales for new products, service sales for retrofit)</li> <li>- Indirect sales (for new products) through <ul style="list-style-type: none"> <li>- OEM sales force</li> <li>- EPC channel sales force</li> <li>- In the US through distributors</li> </ul> </li> </ul>
Intensity / coverage	<ul style="list-style-type: none"> <li>- No restrictions on intensity, except internally</li> <li>- Expansion to Spain and further in other parts of Europe, China, South-Asia and Middle East</li> </ul>
Standardization	Adapted distribution <ul style="list-style-type: none"> <li>- Different language options for biggest languages</li> <li>- Different markets targeted with different distribution strategies (US distributors, exporting to China)</li> </ul>

**Service product:** In the introduction stage the company pursues to sell remote condition monitoring and consultancy services related to it. They also target selling the service product with another service product to enable complete condition monitoring solution. The manufacturer is integrating the service component into the manufacturer's own

products, so that it would not have to be installed separately. Gabrielsson and Gabrielsson (2011) have found that system products are more difficult to market because of mixture of product elements makes them more complex by nature. This decreases the service product complexity. However, remote condition monitoring service enabling component is continued to be sold through intermediaries to penetrate also the manufacturers and other OEM's installed base. The company sees that the service product enables them to offer consultancy services provided by their experts in case of prediction of possible fault. The experts can generate recommendations for actions, which further can lead to more service sales *“Usually out of the recommendation we will come up with some action. As we have such a large service portfolio, we are in a good position in offering service as well. [...] in this recommendation you try to tie up the customer from the beginning.”* (2)

**Multichannel decisions:** The company continues to have dual distribution: direct distribution through company's own channels (new and old products) and indirect (new sales) distribution through intermediary companies. They do not have cooperative partnerships to utilize hybrid distribution as the intermediaries can be considered to be competitive in the market place. However, now that it is also distributors are utilized within the channel, the distribution structure might develop into more cooperative between the manufacturer and these channel members. Expansion through indirect channels is pursued to increase market share and to respond to customer demand, they also want to have higher volume and presence in multiple channels.

**Channel type:** Literature suggest using multiple channels to increase volume and gaining more revenues per customer by choosing most suitable channel type for customer acquisition (Sa Vinhas et al. 2010). The company will use its own core product sales force to sell the service product to new products and service sales for retrofit installations. Also, OEM's sales force is used for new products. Still, helping OEMs to realize the value the service product offers is difficult for the manufacturer, if it is not in the customer specifications. However, the value offered for OEMs is that the high quality remote condition monitoring system creates added value through interpretations and recommendations. It is also easy to handle and install as we as has low installation and purchasing price. Furthermore, with the service products, they can fulfill the specification of the customers and but they also obtain additional revenues for the sales.

The company pursues to expand further by using EPC channel's sales force. Furthermore, management of distribution channels is challenging due to variation between channel structures internationally and some studies have recommended a customized approach for

distribution (Sousa & Lengler 2009). The company is going to use distributors in the US and the main reason is that they lack resources in that market and also, using distributors has been successful in the past on that market. The sales are conducted through sales force because these kinds of system products are easier to sell through personal selling, to promote the value and address more stakeholders.

Nevertheless, the service product would preferably be sold with another service in their portfolio, to enable more complete solution for the customers, which would be harder to sell on the Internet as a package. So it is stated that Internet has limited capability to sell solutions and packages as people are needed to sell the value. The company representatives state that cyber security is considered as a big issue in electronic services, especially in the US. The company has to fulfill the requirements when distributing the service product. For this, the demonstrations in personal sales are usually done by specialists to discuss the issues. Also, customer trust and dependency on the service provider can be created by interaction, which demonstrated the expertise of the service personnel (Bendapudi & Berry 1997). It is claimed that a lock-in effect can be established through interaction; personal contact allows selling more products and selling packages. With this kind of service product, many stakeholders have to be considered because there are many concerns regarding security, but also to sell value it offers. Visiting the customer is seen valuable as: *“when you go to the customer, you go to the office and you meet more people. You can meet both maintenance, operations, also the asset management [...] you meet more functions in the company if you meet them in the company.”* (3)

***Intensity and coverage:*** As stated before, the company pursues intensive distribution to gain more market share and coverage. Product life cycle model seems to be capable of describing different stages related to sales and market acceptance (Grantham 1997). The case company introduced an example by reflecting on product life cycle, and stated that the market is quite mature, there is the demand, stable price and much competition: *“So all we need to do is selling.”* (2) McNaughton (2002) claimed that diversity on a mature market is positively related with multiple channels. They state that: *“If we can cover all the factories offering on a bid we have higher volume and bigger chance of getting the order.”* (3) Thus the company does not see a reason to control intensity and all channels are free to distribute it, as they want to spread to new markets and increase their market share. The only thing that they really want to control, is the sales flow within the company to avoid ‘pancaking of the price’. Pancaking of the price is considered as an issue for this company regarding the service product as within the company all channels or divisions

are adding a margin around 20 – 30% when going through them. This increases the price, which is thus needed to be avoided.

However, different proactiveness levels exist between the company's own channels, and thus some markets are performing well and some have difficulties in reaching sales targets. It said that "*it comes down to culture and individuals*". (2) This reflects to expansion pace and must be addressed. Also, in different markets, the customers already have some existing service agreements, which may include condition monitoring. Also Walters (1986) claims that competition, possible substitutes and existing contracts within the markets may have influence in introducing new products and services, which can make entry to the market harder. The company indeed faces challenges that can be a barrier for expansion. Expansion to the Chinese market has proved difficult, because of the local competition, low prices of local products and the fact that the local companies prefer buying local products, thus they are pursuing expansion through exports. The company is pursuing expansion to, for example, Spain and now target markets are South-Asia and Middle East as they are not yet so mature for the remote condition monitoring systems.

**Standardization:** Customers in different target markets need different combination of services and thus unique channel designs (Vitale et al. 2011: 334). Distributors are utilized on the US market, even though other markets are served by the manufacturer, OEMs and EPCs. It is mentioned that the decision was made by the US organization. The company has a matrix organization, so some of the decisions are made locally and some globally. Adaptation was needed because of lacking resources and previous successful channel performance with local distributors. Also, the Chinese market will be penetrated through exporting. The solution will be sold as a part of the core product, offering an integrated solution. Considering the difficult settings in China this approach for market penetration is claimed to be most feasible. For example, a European company selling their products to China with the service product integrated in it. As stated before, English is offered as main language, but other big languages may be considered for local preferences.

#### 4.1.2.3 Future channel development for case B

It is stated that the manufacturer is not currently charging for the service, but they will start selling subscriptions to gain revenues, this is also seen beneficial in helping the manufacturer to tie the customer to them. Also, in the literature it is stated that companies wish the services to increase sales, because of servicing existing installed base customers, services also help to lock-in and integrate customers by forming hard to imitate

relationships (Lindberg-Repo & Dube 2014: 134). Although, it is stated that local relationships with the end-customer affect successful sales and if there are no established relationships, selling is considered to be more difficult. Furthermore, selling service for other than the manufacturer's products is difficult, even though it would have the manufacturer's service component integrated: "*We have it very difficult to sell it when we are selling through third parties. After they have sold the product further, then we have to go there as a service provider and sell them a subscription.*" (3)

A mobile application is planned to be launched. It is providing an overview of the whole fleet, which would serve the customer needs better. Currently there are only separate URL pages for each product. However, as the core products are complex, also the application has to be. The application development creates a lot of costs and it is stated that a web interface solution might be more feasible and would reduce costs: "*application itself, would be very costly.*" (2) The web solution also enables better connecting the service with the customer's operating system. Another option would be to create an application that would direct the customers the login web page and allow utilizing the same web platform, which would also be cheaper. The manufacturer is further considering the e-service development. Furthermore, the case company states that the service product can be linked to warranty, as the manufacturer can investigate if the core product has been used properly or not and thus define if the end-customer is entitled to some reimbursements. It also seems that presenting the value of the service is difficult, because the electronic service is not tangible. Thus, the company aims at sending condition reports monthly to customers so that they know that the system is monitored continuously and that the end-customers can feel secure about the plant.

Hollensen (2007: 508) states that product characteristics affect the suitability for Internet sales. The case company states that it is looking at web shop solutions as the service product would be suitable, simple and straightforward enough, to be sold via Internet. This would complement other channels and also serve different customers, for example, OEM factories with an easy purchase process. The previous service products the company has had, the complexity, adaptation and tailoring needs have restricted this opportunity. Nevertheless, the service product would preferably be sold with another service in their portfolio, to enable more complete solution for the customers, which would be harder to sell on the Internet as a package: "*When selling in the Internet there is no possibility of selling it as a package.*" (3) So they state that Internet has limited capability to sell solutions and packages, because people are also needed to sell the value.

#### 4.1.3 Case C: Flow management

The service product consists of stand-alone data loggers with visual alert systems, wireless communication modules and sensors as well as electronic service that the customers can access remotely through Internet. The remote condition monitoring system has been on the market less than four years. The manufacturer states to have existing channels that they utilize for distribution and promotion to increase market coverage and market share as well as to offer a local relationships. Distributors are also stated to help the manufacturer to create awareness about their remote condition monitoring offering. The service products are offered to all of the existing distributors and they can decide whether they want to sell it or not. The service products are quite small and relatively inexpensive, so they are suitable addition for the distributors' portfolio and thus fits the distributors' strategy. Through distributors the manufacturer can serve markets diversity. They enable reaching smaller companies that are not possible to reach by the manufacturer's sales engineers and they also offer local contact for the customers. Intermediaries have very close relationship with their customers, so they are important for distribution. However, they are not used for installations and service because of limited resources and skills to handle the product-technology. The manufacturer also considers keeping service internally and states to have resources to handle these activities.

##### 4.1.3.1 Introduction stage strategy

In **Table 7**, the main aspects of introduction stage channel distribution channel strategy are presented. In introduction stage the service product was distributed through direct, company-owned channels. The company used intermediaries in the product sales, but not for service sales and thus not for selling this service product. The distribution type was personal sales utilizing the manufacturer's own sales force. The electronic service interface could be accessed through PCs, smartphones and tablets. In introduction, the company was using only its own direct channels, so distribution was considered exclusive and mainly concentrated on North America and Europe, which were the largest markets for the manufacturer to sell the service product. However, the service product was also pursued to be sold in Africa and Middle East. No adaptations were made regarding distribution, but it was stated that language needs were considered and that acquiring certifications slowed down expansion, for example, in the Middle East.

**Table 7.** Case C: Introduction stage decisions.

Service product	Remote condition monitoring
Multichannel decisions	Single channel strategy: - Direct distribution through company's own channels
Activities divided in channel	- Intermediaries are used in the product channel, but not for service
Channel types	- Direct sales through company's own sales force - Electronic service can be accessed by all devices that can access Internet - Internet site and events used to distribute information
Intensity / coverage	- Only company owned channels, no restrictions - North America, Europe and some in Middle East and Africa
Standardization	Standardized distribution - Certifications between different countries must be considered - Languages must be considered, but only English offered at this stage

**Service product:** With this service product the manufacturer aims at improving the relationship with the customer and to be seen more as a technical partner than just a supplier. The final target was to become a technical consultant for customers: in case a customer would have a problem with the manufacturer's or even competitors' products, they would use the competence that the manufacturer has to evaluate the problem and find a solution. This would generate new business for repairing and upgrading existing items as well as selling spare parts. With the system the customers could get information continuously, and the main benefit of the current solution was stated to be that the data is more accurate than the traditional hand-held condition monitoring solutions. In addition, offering competence and know-how were important factors because the customers were seen to lose their competence due to demographic and financial development. Also Rapp et al. (2008) have identified that electronic business has at least four value drivers for the manufacturers, namely, lock-in, efficiency, novelty and complementarities. The manufacturer sees that the service *"can help us in creating a relationship with our customers and we can also use the relationship to sell more in the traditional business"*. (4) However, the service product was completely different from the traditional products and the end-customer did not know that they were selling this kind of service products.

**Multichannel decisions:** On introduction stage only direct distribution was used for the service product. This is consistent with the product life cycle model, as it proposes that



when the product-technology is in introduction stage the product is sold through direct sales representatives by the producer or via indirect sales force (Moore 1991). Furthermore, the company claimed that they had possibilities to add more resources for sales in case market demand is growing and more people are needed for sales and installations. By offering the service directly the manufacturer also wanted to highlight its own competence. The manufacturer used distributors in products sales, which are stated to be valuable for distribution of the company's products, but the manufacturer did not have any partners for service. There was channel integration in product sales, where the manufacturer supported the distributor in the sales process. The distributors were not utilized in service product distribution, because they were considered not to have enough competence or resources for the actual installation and data analysis or providing field service: *Once information is on our server, even the distributors can access to it and the data, but I guess they are not interested in that. [...] they do not have enough technical competence.*" (4) Also, in literature it is stated that direct distribution can be used if the intermediaries do not want or are not capable of distributing a product or service (Palmatier et al. 2015: 167 – 169).

**Channel types:** In introduction stage, the company's own direct sales force was used, and their own service engineers were needed to install and commission the remote condition monitoring service product. The distributors that were used for product sales were not either capable of providing the online service, because only the service provider could create the portal. Thus also a contract was needed between the end-customer and the manufacturer. So due to product-technology characteristics and need for heavy support, only own sales force was used (Moore 1991). This also related to lacking competences on the distributor side and wanting to keep the technology and competencies proprietary for the manufacturer. Furthermore, in the past they had decided not to use OEMs, not to form dual structure, to have more control over the channel: *"We didn't want to be in the position of job going to other OEM and obviously we want to know what is happening and if any problems would occur."* (5) Direct sales force was considered as a benefit as it enables having a direct contact with the customer and having a personal discussion. For example, via a conference call, the manufacturer had better chances to offer solutions, because different matters could be discussed: the environment, issues and how things are managed onsite. Direct contact enabled also demonstrations and utilizing success stories promote the value gained from this service.

The online service portal enabled all the parties to see the data, if so allowed and it could be accessed on all devices that are connected to the internet, but connecting it also to the

customer's own systems was also possible, to serve the customer better. The benefits of self-service is not only for the service provider, but also for the customer in terms of convenience in accessibility and availability (Collier & Kimes 2013). The value that this service was stated to provide were monetary savings for the customers by avoiding a mechanical failure and data to better manage their assets. Furthermore, there were no internet sales for this service product and information was offered only on the Internet site. Internet sales. Internet sales were considered possible, for less advanced service components that do not need configuring, but for the remote condition monitoring solution it was considered not to be feasible, because of the needed engineering and configuration as well as to ensure that the customer chooses a solution that is technically feasible. So, it can be stated that if the service products would be more standard, it could have been an option. The manufacturer already had an online platform for sales, but it was only used to sell training. This online platform was stated to function well in North America, but it was not used extensively in Europe.

***Intensity and coverage:*** The company used direct sales channels and the distribution was exclusive to ensure the competences needed for the installation and commissioning of a solution product as also concluded by Gabrielsson & Gabrielsson (2011). The customers did not necessarily perceive the manufacturer providing remote condition monitoring solutions, whereas the competitors were various instrument providers that are known for instrumentation: *"It is a product that is completely different from our traditional Flowsolve products."* (4) However, the competition was offering production control features and solutions that are not industry or product specific. This was seen to enhance the manufacturer's position compared to competition. Even though competitors had been on the market for years, it can be seen that the market readiness was still developing for these kind of solutions as there were especially security related issues that affected the distribution of the service product.

In introduction stage the main markets were North America and Europe, whereas Middle East and Africa were in pursuit. There were differences in acceptance for this kind of service products between the markets, which related to whether the customers were accustomed to these kinds of systems and data sharing. Thus, it can be stated that market maturity affects distribution as also claimed by Lele (1986). There was more acceptance in the US than, for example, in Europe. In North America, old North American companies were: *Accustomed to outsourcing many services to external companies.* (4) They were stated to be much more familiar with wireless systems and online services and to share data with a supplier. The manufacturer stated that for this reason the sales were not going

as planned in Europe. Additionally, the remote solution was difficult to sell in the Gulf region as a special certification is needed to enter each country. Furthermore, in Europe and North America, there are many old plants that need to be upgraded also from instrumentation point of view, which helped in increasing coverage. Whereas, in Middle East, there were many new plants and already many new instruments wired to the control room.

**Standardization:** In introduction stage the distribution was standardized. Even though no adaptations had been made, culture and differences between markets were considered important. The service was offered in English, but it was recognized that it might be needed to be translated into some languages on request. It was stated to depend on cost and time to support those wishes. Between the markets, there were some cultural aspects that were needed to be considered and also, different standards and electrical codes. Literature states that legalities and local business practices might additionally restrict certain channels or interfere exclusive sales agreements (Douglas & Wind 1987). This was a fact as the manufacturer had issues in Gulf region countries, because of all of them required to fulfill their own standards and codes. As an example, if they wanted to sell it in Saudi Arabia, the equipment needed Saudi Arabian certification, if it was wanted to be sold in another country, they had to obtain certification for that country too. It was an issue as if there is no certification, the company cannot get many opportunities and without the opportunities they cannot invest the money to get the certification.

#### 4.1.3.2 Growth stage strategy

The company has started pursuing hybrid distribution structure by utilizing its own channels, but also the indirect intermediary channels (See **Table 8.**). They are thus pursuing similar setting as in their current product sales, where they cooperate together with the intermediaries to support them in sales. Whereas, the intermediary provides them with increase coverage and local support for the customers. They are using of both their own sales force and the distributors' sales force. In addition, as a new feature, there is a telesales trial for the lower price range products, which does not intend to sell the remote condition monitoring, but more to raise awareness. They are pursuing a selective distribution through their established distributors and increasing coverage on the market aggressively. Furthermore, no adaptations are considered to be necessary at the moment, but the manufacturer still considers local responsiveness in different markets very important.

**Table 8.** Case C: Growth stage decisions.

Service product	Remote condition monitoring - Consulting services added as extras
Multichannel decisions	Hybrid multichannel distribution: - Direct distribution through company's own channels - Indirect distribution through distributors
Activities divided in channel	- Intermediaries are used sell the service product in which manufacturer supports them
Channel types	- Manufacturer's own sales force, distributors' sales force, telesales trial - Electronic service can be accessed with any device - Internet site and events for information
Intensity / coverage	- Selective distribution (Increase intensity aggressively within channels) - Increase coverage, further expand in Middle East
Standardization	Standardized distribution - Languages have to be considered

**Service product:** In addition to remote condition monitoring the manufacturer is pursuing to add consulting services into their portfolio for added value. This would be considered to enable better customer relationships and being a valuable partner for them. They are though facing an issue: the people that are interested in buying the service do not decide on the budget. They can suggest the service product for the maintenance team, which is usually the owner of the budget, but if that team prefers to use the money on different things, the end-customer will not purchase the service products. The manufacturer pursues to approach the customers on a higher level, to contact the top management and also discuss with the customer on corporate level to give recommendations for purchasing. It was also stated that they are not consider integrating the service component on the new core products by default.

**Multichannel decisions:** Product-technology life cycle is able to explain the channel expansion into multiple channels through the diffusion of the product technology into a broader customer base (Lele 1986). The company started to distribute the service product through distributors, and first they are used to sell the physical service component. The manufacturer states to have existing channels that it can use for distribution and promotion to increase market coverage and market share, also intermediaries help the company to create awareness about their condition monitoring offering. They explain that: *"The benefit for us is that we are moving towards volumes."* (5) With the new service

product channel also integration is possible. The distributor can sell the physical component and the manufacturer can provide installation and the electronic service. This makes the sales process more efficient and similar to their regular product sales process. Thus, the distribution channel is a hybrid one, where companies are handling their own functions in a cooperative manner.

**Channel types:** In addition to the direct, company-owned sales force they have started to sell through distributors' sales force. It is said that the distributors can sell the component, for which they will get a commission. Chung et al. (2012) state that the intermediaries are an important asset for the manufacturers to serve end-customers, but this relationship also has to create and deliver value for the customers. The manufacturer sees real benefits in having trust and a long-term relationship with the intermediaries. It is stated that "*trust is then based on that they have distributed our equipment for years*". (5) The distributors, though, are not considered having enough competence or resources for the actual data analysis and service. This is why the distributors are trained only to sell the service product. Regardless, the manufacturer has to make the installation and set up the service interface. Additionally, there is a telesales trial in the UK, because the company has limited penetration especially in the food and beverage segment and lower price category. As also stated by Laudon & Traver (2010: 6-15) different channels can help create awareness. The manufacturer states that through telesales it seems to be easier to promote low-price products and raise awareness also for the remote condition monitoring solution.

The service products are quite small and inexpensive, so, the company thinks considers it as suitable product for the distributors' portfolio offering and fitting in the distributors' strategy. The incentive is that the distributors get fuller portfolio, but they also get a very good margin for this service product. The service product is offered to all current distributors and they can decide whether to add it to their offering. It is also stated that the intermediaries have very close relationship with their customers as they have more frequent contact that enables closer relationship (Schultze 2003). When an intermediary does not want to carry the company's service product, the manufacturer is not directly bypassing them, but it first informs the distributor that it will contact the customer. Even in this situation, the intermediary will get allocation for booked order: "*I have never faced a problem with the distributors, we always go to them first, because they are the people talking to the customer on a more frequent basis.*" (5)

Security issues are stated to be a problem when the service includes data sharing and wireless technology. Usually the company receives immediately a negative reaction

especially from the customer's IT department, when mentioning that the service product is a wireless solution. It is stated that the customers are really reluctant to transfer data without cables. However, if the immediate reaction can be bypassed and a meeting is scheduled, discussing the system and how it is protected, enables to obtain acceptance. So personal contact and discussions with product specialists and IT department is needed to create sales. This is consistent with Bendapudi & Berry (1997) who state that trust can be gained by demonstrating the expertise of the service personnel. So, it can be stated that the market maturity is still developing.

Furthermore, the manufacturer proposes that Internet sales is a mentality issue and that at the moment especially in Europe online sales would not be suitable. It is claimed that in Europe are not willing to purchase goods by using company credit card. In North America, it might be feasible, but it has not been pursued. As stated by Arikan (2008: 260), even though websites might be cost-effective, face-to-face contact might turn into higher conversion rates and higher average order values. It is stated also that the volume of inquiries that would translate into orders would not justify the cost of creating the system. Also, discussing different solutions cannot be done through a webpage form: *"we don't want to be in a position where our customers are just looking at it and picking it, doing the work themselves, we want to be in the front end understanding what their real needs are, because sometimes you have to be a little creative with the solution. Whereas if you put something online, the answer to the customer's problem is not immediate so they go and look elsewhere."* (5) The lack of Internet sales is thus related to product characteristics, cultural differences, but it is stated also to be due to internal investments.

***Intensity and coverage:*** Intensity of partners can be controlled by the manufacturers and intensity decisions determine how much competition the company allows within the chain (Palmatier et al 2015: 163 – 179). There are established competitors on the market and the manufacturer acknowledges that it has to be ready for rapid expansion and aggressive pricing to create awareness. Thus, currently, they do not want to limit the intensity within the existing channels, and the service product is offered to all of the distributors that can decide to distribute it. There is, though, control over the channels as it is stated that *"our distributors have very specific regions assigned to them."* (5) So it can be stated that the manufacturer is pursuing a selective distribution.

Distributors are used to sell the remote condition monitoring component, because the distributors can reach smaller companies that are not possible to reach by manufacturer's sales engineers. So they provide the manufacturer with increased coverage. Also, the

manufacturer states that there are better success possibilities when there is a relationship, not just transactional basis for the business. They also state that using the distributors creates value for the end-customer too: *“there is the benefit to the end user having someone local who they can talk to and like I said that speaks their own language rather than having to talk to [...] someone they don’t know.”* (5) The manufacturer further pursues increasing coverage on their existing markets, but also focuses on Middle East as their target market.

**Standardization:** At the moment, the web interface is only in English, but they state that they are looking for translations. In majority of the Europe English is considered to be sufficient, but translation to native language would be preferable to serve the customer. There are, though, some aspects that the manufacturer has to consider when deciding whether translate the electronic service or not: *“Then it comes to cost and time and our ability to support that with a native speaker”.* (5) So it can be interpreted that when the company decides to expand further on different markets it may have to reconsider its strategy related to standardization.

#### 4.1.3.3 Future channel development for case C

The manufacturer states that they intend to utilize their intermediaries to do most of the sales work in the future, including electronic service sales. For this the intermediaries would get additional revenues and they would be the local contact for the customers. The manufacturer would continue to provide technical help for sales and conducting installations. They are thus pursuing the same setting in the future as in their current product sales. However, having service partners might become useful for the manufacturer as special knowledge is needed when there are different standards and codes. The manufacturer states that only one person cannot handle all of the installations: *“So we basically have the client to provide the skilled labor to do the installations. Whereas in the North America, they have on standard electrical case so over in North America our distributors could be trained to do it because everybody is going to use the same electrical installations”.* (5) Currently the distributors, are not considered having enough competence or resources for the actual installation, data analysis and service. This is why the distributors are trained only to sell the service product – training them would be more a long-term plan, while the company should discuss internally the amount of control they want to maintain and the goals of their service business.

#### 4.1.4 Case D: Welding and cutting

The service product consists of remote condition monitoring component and electronic service. The service product component enables an electronic service that can be accessed online or it can be configured to connect with the customer's control systems. The service product has been available less than one year. This case company really appreciates multichannel option to expand its reach and to serve market diversity – its diverse markets, customers and products. They prefer utilizing already established channels, because they see that there is cost and effort needed to build new channels, but most of all, the existing channels are regarded as having a good fit with the service product. Used distributors support in service and maintenance, but also to increase the volume on the market. The relationship with the distributor is highly valued and they are considered as partners. This also explains why channel integration is established related to this service product. The service component will be integrated in all of the new core products to reduce complexity and enable selling the product-technology through the less advanced intermediaries, namely, distributors. The markets that have been penetrated are the US and Europe, which is explained by the demand on these markets as well as manufacturer's intention to focus on these markets first and gather resources for further expansion. The company is pursuing to establish Internet sales for less advanced segments and penetrate other markets in later sequences, for example, South America and Asia.

##### 4.1.4.1 Introduction stage strategy

In **Table 9**, the main aspects of introduction stage distribution channels are presented. In introduction stage the service product was distributed through direct, company owned channels as well as indirect route and this forms a dual distribution channel. It seems that no integration of activities existed regarding this service product at this stage. The distribution types were direct sales through the company's own sales force and integrators' sales force. The service product was decided not to be distributed through distributors, even though they were otherwise important for product and service distribution and some integration within the channels existed. However, the manufacturer used integrators in distribution to put together advanced systems and so complement their own capabilities. The electronic service could be accessed through any device (PC, smartphones and tablet devices) and the responsive platform allowed to configure it to customers' needs. Open application programming interface enabled easy configuration. Furthermore, the Internet site was used for information, but the service product was also presented in different events and live demonstrations. Distribution was selective as it was restricted on certain



channel members. At this stage the company was targeting the advanced segments (40% of the market) through its own and integrator distribution channels. Distribution concentrated in North America and Europe. No adaptations were made regarding distribution.

**Table 9.** Case D: Introduction stage decisions.

Service product	Remote condition monitoring
Multichannel decisions	Dual multichannel distribution: <ul style="list-style-type: none"> <li>- Direct distribution</li> <li>- Indirect distribution</li> </ul>
Activities divided in channel	Overall products and services: <ul style="list-style-type: none"> <li>- Manufacturer creates market pull</li> <li>- Distributors sell product and services and take care of simple tasks and keep stock</li> <li>- Integrators are used for more complicated tasks</li> </ul>
Channel types	<ul style="list-style-type: none"> <li>- Direct sales through company's own sales force</li> <li>- Indirect sales through integrators' sales force</li> <li>- Responsive platform for all devices, open API (application programming interface)</li> <li>- Internet site for information, exhibitions, trade shows, live demonstrations</li> </ul>
Intensity / coverage	<ul style="list-style-type: none"> <li>- Pursuing selective distribution</li> <li>- Europe and North America in first sequence, only advanced segment</li> </ul>
Standardization	Standardized distribution

**Service product:** The service product was stated to increase competitiveness of the core product, make it easier to sell and also facilitate discussions with the customers to identify further tools for value creation. It was seen that the service product helped to avoid pricing discussion with the customer. The service components could be installed to new or old devices, however, in some of the more advanced core products the service enabling components was already integrated. The separate service component was offered to the advanced segments to enable retrofits, quicker expansion and to save research and development money: *“This being a highly regulated field you need to do a lot of certifications and specifications if you integrate it. To penetrate quickly the product portfolio and enable data acquisition we have some separate modules and integrated ones. But the strategy is for sure to have data acquisition in all of our products integrated when we move forward.”* (6) With service product like this, distributors feared that the manufacturer would obtain a good understanding of the installed base in their territory,

which would enable it to bypass the distributors. It is stated, though, that this was not in pursuit as it would mitigate the idea of having the distributors in the first place. To alleviate this fear it was stated that *“we address the customer together with the distributor”*. (6)

**Multichannel decisions:** From introduction the company used both direct and indirect channels: *“we have such a diverse customer base, we need multiple channels”*. (6) Intermediaries reduce points of contact and thus costs of serving diverse customers (Palmatier et al. 2015: 176 – 177). The manufacturer used both their own channels, but also integrator channels to distribute the service product in dual structure. They explain: *“In simple terms we try to find ways to leverage the ones we have. Because it is costly and hard to build new channels. And we also see a good fit in the capabilities we have in the channels today what were needed to sell this kind of service.”* (6) There was no significant activity division within the channel regarding this service product. Overall in activity division within the channel it was stated that the distributors were used for product and service sales and integrators for more complicated tasks. Distributors are not as skilled, so sometimes the manufacturer must create a package, where the manufacturer handles services that the distributors does not have capabilities to conduct. Also, the service product was not distributed through distributors, even though they were otherwise important for product and service distribution and integration within the channel existed: *“It is easier for them to sell because we have created the demand pull.”* (6)

**Channel types:** The company had a combined sales force for product and service sales and it was seen to be a success factor that there is aligned interest in the sales force. So both products and services are sold simultaneously and there is the interest for service sales. In introduction stage the company used integrators as their indirect channel for distribution in addition to their own direct channels. Integrators were seen to be advanced and able to do installation and commissioning of the service product solution. Scherer et al. (2015) suggest that companies should understand how and when the new technologies create value and offer valuable experiences. Thus, integrators could utilize the electronic service platform to add services related to productivity and process optimization. Even though, data sharing was an issue with the customers, they were willing to share data with the integrator during the commissioning and the running phase to stabilize and optimize the process. When the system was finalized, the customer normally disabled the connection. Afterwards, they could use the integrators, for example, in each quarter to do a productivity review or other tasks.

Real-time services are a possibility to help customers create long-term value, improve productivity and enhance safety (Vitale et al. 2011: 346). The service product was sold as a start kit with elementary data, communication and analysis enabled, but for each customer the service was customized according to their special needs. The company must consider how the real-time data can be translated into true added value (Lindberg-Repo & Dube 2014: 118). The manufacturer had considered this by enabling customer access the electronic service remotely on all devices that are connected to Internet. The service could additionally be connected to the customer's control room because it has open API that enabled configuration with customer's systems. This solution made the service even more valuable as enabled easy access to the data and the customers had demand for both: *"We have both types of demand, so that's why we have chosen that. To offer responsive platform."* (6)

The value that the remote service offers was to shorten the response time and shortening the mean time for repair. The data was stated also to be used for improving productivity, optimize processes and automate certain parts of the process. The service is reliant on shared data and if the customer does not share it, the manufacturer is unable to provide service. Process is key in this type of business, the type of parameters that have been set to do that particular type of activities, and thus it makes the customers reluctant to share data externally. This was solved in the introduction stage by allowing customers to have the servers in their own location and letting them decide when they want to share data with the integrator, distributor or the manufacturer. End-customers were stated to pursue solving issues by themselves, and data sharing was negotiated only if help was needed: *"The default is no sharing. But in terms of services, it is reliant on shared data."* (6)

The service was not sold through the Internet. To unlock the full potential of the condition monitoring service for the advanced segment Internet channels were not suitable as the platform is needed to be configured to the customer needs. The manufacturer wanted to create highest possible value for the advanced segment and was willing to offer customized service package for each. Thus, it was stated that Internet sales are not suitable for advanced segments, but it would be possible to be realized with mass market products: *"That is more in the mass market segment where you do not need local installation for data acquisition and so on, those machines will be linked to the cloud."* (6)

***Intensity and coverage:*** Intensity of partners can be controlled and intensity decisions determine how much competition the company allows within the chain (Palmatier et al 2015: 163 – 179). Distribution was selective as it was restricted on certain channel

members. In introduction stage the company was targeting the advanced segments (40% of the market) by using only its own channels and integrators for the distribution. Europe, North America were in first sequence of introducing the new service. In Europe it was even stated to be mandatory to have this kind of a solution to compete. The strategy was to penetrate these two markets and try to gain market share and revenues to finance entrance to other markets. Before the decision to start marketing the service product, the opportunities were mapped carefully and the manufacturer also talked to a vast number of customers. They planned that the advanced segments would be first targeted in Europe and North America and only after that the less advanced segments would come in the cycle. In the market there was a clear demand for data driven services, especially in the more advanced segment, where the penetration has been fast, thus it was targeted first. The manufacturer stated that the advanced segments are early adopters, but they are also less price sensitive and they were usually catered directly by the manufacturer or by the integrators. This is also according to product life cycle model as it includes sales changes, identifying the stage and sequential sales behavior (Grantham 1997). At this stage the sales people were eager to sell the service product, but there was limited competency and thus there improvement opportunities, which was seen to limit the growth pace.

***Standardization:*** Standardization enables economies of scale and scope, but also control and coordination over the marketing activities (Levitt 1983). No adaptations were made in introduction stage regarding distribution. However, channel structures are stated to vary across markets based on market structure, logic and concentration of customer type and these kinds of factors were admitted to be barriers for standardization. According to Dimitrova and Rosenbloom (2010) cultural, socio-economic and market structure related aspects can affect standardization negatively. Those different factors affected the distribution channels for case D only in rate between direct and indirect channels used, for example: *“Comparing North America 80% distributors and Europe 60% distributors. We have more advanced type of customers than we have in US for example.”* (6)

#### 4.1.4.2 Growth stage strategy

The manufacturer continues to use its own channels and integrators, but it also pursues to utilize hybrid structure in distribution as distributors are added to the service product distribution channel (see **Table 10.**). The distributors are added when the products for less advanced segment are enabled with integrated service enabling component. These distributors are selling simple service packages created by the manufacturer. Sales force continues to be important type in distribution. The manufacturer pursues selective

distribution and penetrating the less advanced segments is started. In the first sequence including North America and Europe are covered. Different segments, advanced and less advanced, are reached through different distribution channels. Integrators and the manufacturer cater advanced segment and the distributors serve the less advanced segment.

**Table 10.** Case D: Growth stage decisions.

Service product	Remote condition monitoring - Packages for distributors - Integrated service component and separate version
Multichannel decisions	Hybrid multichannel distribution: - Direct distribution - Indirect distribution through integrators and distributors
Activities divided in channel	- Manufacturer creates market pull - Distributors sell simple packages, take care of simple tasks and keep stock - Integrators are used for more complicated tasks
Channel types	- Direct sales through company's own sales force - Indirect sales through: - Integrators' sales force - Distributors sales force - Responsive platform for all devices, open API (application programming interface) - Internet used for promotional material
Intensity / coverage	- Pursuing selective distribution - Increased intensity and coverage, penetration to less advanced segment in North America and Europe
Standardization	Adapted distribution - Reaching different market segments with different distribution channels (advanced, less advanced)

**Service product:** The business logic is stated to be that the customer buys a product with connectivity, including support for a certain time period. After that period, the customer needs to renew the subscription. If the distributor or integrator sells the service contract to the customer, they will pay a license fee since they are using the manufacturer's platform to deliver the service. That forms revenue streams for the manufacturer, whereas, the distributors will get the revenue streams from the service contracts. The intermediaries are willing to pay the fee, because they will gain benefits from more attractive portfolio and increased price due to the remote condition monitoring service. The intermediaries

will also receive reports of their installed base within their territory and triggers that they can utilize to offer service. The service offers very deep access into the customer's operations, which then enables tailoring offering to their needs to unlock even more value. This information can also be utilized by the manufacturer when designing new products. For the advanced segment they are selling both the retrofit model for old products and products that have the service component integrated. Whereas, the mass market products are sold only with the integrated service component and no retrofit solution.

***Multichannel decisions:*** Multiple distribution channels provide manufacturers with an opportunity to expansion by reaching different customer segments through different channels or serve the same segment's varying needs through multiple channels (Sa Vinhas et al. 2010). The manufacturer will continue to use its own direct distribution, but also indirect distribution through integrators and distributors. Integrators are continued to be used for more complicated tasks. As stated before they try to leverage the channels they already have, because building new channels is hard and costly and through them. Hybrid distribution will be implemented when distributors are added to the service product distribution channel. The manufacturer creates market pull and distributors sell simple packages, take care of simple tasks, keep stock and maintain the relationships with the customers. However, if the manufacturer is needed for more complex tasks or bigger projects, the manufacturer and distributor cooperate to serve the customer. Furthermore, the distributors are not as skilled, so the manufacturer and distributor can work together to offer service for the customer.

***Channel type:*** The company is using its own direct sales force, integrators' sales force and distributors' sales force to sell these service products. For the intermediaries the (integrated) service component makes the product more competitive and enables them to sell more, but also to increase price. The benefit of having intermediaries is that they provide the manufacturer with feedback from the installed base and they also provide information on how the products are used. It is stated that the manufacturer can sell more because of the extensive service network, so they are willing to share some service revenues to the intermediaries.

Developing services that benefit distributors is seen important as they make the manufacturer's products more attractive to sell. In introduction stage distributors were not used within the channel, but as the core products are enabled with service component, they are used in distribution. However, the retrofit model will not be sold through distributor channels, which cater the less advanced segments. It was decided, because the

cost versus benefit rate does not fit the lower price categories they serve. The less advanced segment prefers replacing the whole product when it breaks compared to not being able to use the product during the installation of the service component. As stated by McNaughton (2002), distributors may be incapable to develop product and market specific knowledge, so they cannot offer the same level of expertise as the producer. Also this case supports this, as it is stated that the distributors lack the know-how to offer more advanced services and installation of the retrofit version. The different channel complement each other: *“Distributors are not capable of putting together an advanced system and for that we need integrators, whereas the distributors have excellent coverage and good service network that we can use also all the types of, the advanced categories of equipment.”* (6)

There is a partner program to avoid channel conflicts and to make sure that the partners are evaluated with certain criteria. Also, the company aims at avoiding partner ‘bypassing’ by addressing the customer together with the distributor. Furthermore, the customers want to buy from the distributors, because of the value they can provide. Through intermediaries the customers are stated to receive improved service and delivery. Also according to Sa Vinhas et al. (2010) when the business customer has purchased something, support is needed to solve issues to enable long-term relationship, positive experience and better performance of the newly purchased item. The distributors are highly important for the company: *“We see our distributors as partners and we are looking to build long-term relationship with them”*. It is stated that the distributors are *“important extension to our sales force, because they offer increased coverage for us.”* (6)

The electronic service benefits all parties. The value of the service product for the distributors is to know their installed base in their area, to enable contact with the customers and to be able to offer service. The key information the distributor needs is the location information of the installed base, which is not an issue for the customer. Also the ‘triggers or alerts’ from the system that would be generated would help to pre-order spare parts and prepare for the fault, thus enabling faster response time. When there is, for example, an alarm that something is wrong, the customer can ask the distributor, integrator or manufacturer to connect with the product for remote diagnostics: *“The data acquisition and data analysis enable further services attached that the distributor can benefit from. For instance, service and maintenance contracts and things like that.”* (6)

***Intensity and coverage:*** The company is pursuing selective distribution, as they are using only chosen distribution members on the market. They have territories and they limit

which equipment is sold in which channel to avoid conflicts. However, they want to allow a small amount of competition within the market to keep the intermediaries competitive: *“we appreciate some conflict as well because that price improvement that the distributors, we don’t want to give them too much exclusivity, because then they would start losing their competitive edge.”* (6) According to Lush and Vargo (2014) value is context related and contingent on resources on the market. The company is first pursuing market share in Europe and North America to gain resources to expand further. The advanced segment was first in pursuit, which is followed by the mass market when service enabling component is integrated into the products. In later sequences, the company wants to expand to other areas as well: *“In some advanced segments, for instance, automotive, we see demand also in South America, in Asia.”* (6)

**Standardization:** Different markets vary and according to Shoham (2002) homogenous submarkets can be identified through segmentation which also enables positioning according to the segments. There is difference between the advanced and less advanced markets, which affects distribution of the retrofit version. A separate service enabling component is needed to offer remote condition monitoring service for the old devices, but it will be offered only for the advanced segment. It is sold by the integrators and the manufacturer. It is claimed that: *“Product that we sell through our distribution has a shorter life cycle, so you change all the installed base quite quickly in all segments. Whereas in the direct (advanced) segment the machines can be for 10 – 12 years or so.”* (6) So it can be stated that customer characteristics and product-technology maturity affect distribution. Retrofit will be for the above mentioned reasons sold only for direct segments and through integrators, unless the technology can be developed to very light and cost-efficient. It is also claimed that integrating the service component into all of the products is part of the strategy, because there will be less cost, less complexity, added value and it expands the market. In addition, it is also stated that: *“It might be that this customer that is does not see the value or want this data acquisition and analytics, might realize later on that it is something that they want to do and that is when the device is already enable to do it. Small step is then only needed.”* (6)

#### 4.1.4.3 Future channel development for case D

It is stated that services that are digital by nature and do not require physical elements can be easily sold via Internet (Gabrielsson & Gabrielsson 2011). The manufacturer states that the enabled products and services will be sold on the internet for the less advanced segment, because local installation for data acquisition is not needed. The manufacturer



already has some sales on the Internet, so starting online sales is considered easy. The customer buys the machine and starts it and then then the product will be register to the cloud. It is stated to be very similar to computers or phones and other devices. It is stated that: *“It is rather simple configuration, so it can be as an option basically, if you buy a product and you click the option box for connectivity and cloud service.”* (6) In the advanced segment more configuration is needed and thus it is not suitable for Internet sales, the company considers that more value can be create through customization. Ba et al. (2010) state that personal service channels are the only form that can provide responsiveness in customer service and that some services that are complex may have to be complemented with personal service. In addition, it is stated that there is a high demand from the customers to have only one data acquisition and analytic system for their diverse installed base. This is why the manufacturer is considering to develop remote condition monitoring system also to competitor machines. Furthermore, coverage will be increased to other markets as well in the later sequence, for example, South America and Asia.

## 4.2 Cross-case analysis

In this section I am going to present the similarities and differences in the channel strategies between the cases. First, the different stages of distribution strategies are compared and then the channel development related matters are discussed. I will reflect my findings from individual cases analyses, pursue to examine and describe how different factors affect distribution channel strategy decisions.

### 4.2.1 Comparison on the introduction stage strategies

In this section the introduction stage strategy comparisons are presented (see **Table 11.**). Based on the research in introduction stage, the service products was installed on new products, but also on existing base of equipment. So, offering this as a factory-installation or post-sales installation to old products (‘retrofit’) seemed to be standard in the market place, the service component was not yet integrated into (most of) the core products, whereas most of the companies strategically pursued that. Only one of the companies (case D) had integrated service component in some of the products. Also, only one company (case C) did not mention that they would have a plan to integrate the service component into the core products, this was due to its cost relative to the product price. Product-technology newness, cost and complexity and industry related factors were affecting integration decisions regarding the service product.

**Table 11.** Comparison of introduction stage channel strategies.

Case	Multiple channels	Activities divided	Channel types	Intensity / coverage	Standardization
<b>Case A</b>	Direct (single) channel distribution through company's own channels	Partners and integrators used only in product business  Customers can hand over the product care for the manufacturer	Own sales force (service sales),  E-service through browser on any device  Internet site for information	Exclusive distribution  Most sales in Europe and US, mainly small and mid-size customers	Standardized distribution  Different languages offered
<b>Case B</b>	Dual (multiple) channel distribution:  Direct through company's own channels (new and old products)  Indirect (new sales)	Overall in services: High-end services performed by manufacturer  Low-end service by low-cost service providers  Products sold also through EPCs	Own sales force  OEM sales force (new products)  E-service through browser on any device  Internet site for information, movies, events	No restrictions on intensity  North America, Europe, Brazil	Standardized distribution
<b>Case C</b>	Direct (single) channel distribution through company's own channels	Distributors are used in the product channel, but not for service	Own sales force  E-service through browser on any device  Internet site for information, events	Exclusive distribution  North America, Europe and some in Middle East and Africa	Standardized distribution
<b>Case D</b>	Dual (multiple) channel distribution:  Direct distribution  Indirect distribution	Overall products and services: manufacturer creates market pull  Distributors handle simple tasks, keep stock  Integrators for complicated tasks	Own sales force  Integrators' sales force  E-service through browser on any device  Internet site for information, events	Selective distribution  Europe and North America in first sequence, so far only advanced segment	Standardized distribution

**Multiple channels:** Cases A and C had direct distribution because even though they had distributors for their products, they did not have partners for service, thus service products were sold through their own service organization. Whereas cases B and D had dual distribution, which could not be explained only by the maturity of the product-technology, even though they stated that there was demand on the market. Case B did not have partners in distribution, as it chose to use competing OEMs channels to distribute the service products. Furthermore, case D had partners for product and service distribution, but its distributors lacked the competence for distributing this service product. Thus case D distributed only through the manufacturer and the integrators that have the competence for installation and commissioning. Furthermore, regarding these service products, none of the cases had significant channel integration efforts within the channels, even though, there was clear indication of channel integration related to other product or service sales. This related to the fact that the service products were quite new to the market and it required support, which relates to chosen channel types that have a great impact: Two of the cases (cases A and C) were using only their own direct sales force, case B used competitive, skilled OEM channels to distribute the service products and case D used integrators that are skilled and supposedly competitive with the manufacturer.

**Channel type:** All of the cases were using direct sales force. The main reason is that with this kind of product, there are security issues and value related aspects that have to be discussed with the end-customer. Relationship and trust was stated to help to sell this kind of service. Also, the service products needed installation, commissioning and configuring to the customer specific needs, thus people were needed in the process. All of the companies stated that the electronic services were used through a browser (online portal or interface) that could be accessed with all devices, including PC, smartphones and tablet devices, to provide convenience for customers. The remote condition monitoring services offered automatic warnings about the condition based on the set measures. This was one of the greatest benefits for the customer, as the products were constantly monitored. The alerts could be directed to manufacturer's service support, who was able to support the customer either remotely or by visiting the customer's plant. This could create even more value through offering portfolio of services, for example, process optimization, based on the customer's needs. Also, a major benefit was mentioned to be the ability to connect the service with customer's systems.

**Intensity and coverage:** Again, two of the cases, A and C, had only company-owned channels, so they had exclusive distribution. This was mainly because they had traditionally wanted to keep the services to themselves, and thus they did not have service

partners that could support their expansion and would be able to install and commission the service product. In addition, case A stated that they had first penetrated the markets that have enough skilled people to offer this service. They had issues in providing the service globally as the organization was not big enough. Case B had no restrictions on intensity, which can be stated to be due to lacking partnerships and that the service product was suitable even for the competitor's products. Whereas, case D was pursuing selective distribution through integrators and its own channels. Additionally, it seemed that North America and Europe, were most suitable for the service products in introduction stage as all of the cases had penetrated those markets. They were considered to be more mature for the service products, as they perceived the value that could be derived with the remote condition monitoring service easier. Furthermore, having skilled labor or enthusiastic individuals was a factor that enabled expansion in all of the cases. Also, having headquarters and well-established operations in these areas can be claimed to have affected distribution decisions related to coverage.

**Standardization:** At this point, all of the cases had standardized distribution strategies. This was mainly because they were still expanding on different markets and were on an early stage in that process. They all admitted some kind of need for possible adaptations when they continue to expand further. Case A was the only one that stated that they offered the online service in different languages, which was considered to be due to the fact that their service was sold as a part of a service agreement, containing human interaction and thus they needed to be more adaptive to the different markets and cultures. Case A further stated that the service has to be local or at least regional. So, it seems that service configuration also affects ability of standardizing distribution strategy.

#### 4.2.2 Comparison on the growth stage channel strategies

Based on the research, the service products are integrated into the new products in most cases to reduce complexity and decrease amount of post-installations on customers' plants. Thus, enabling resource savings, easier connectivity and increased value creation. However, the service product must also be sold on existing base of equipment to enable their remote condition monitoring, if requested, to generate value for the whole installed base. Furthermore, the companies pursue selling subscriptions or service agreements. They are also planning on expanding to consulting services as well as improving products and services with the help of the acquired data. Lele (1986) proposes that according to product-technology model there is a tendency of moving towards multiple channels when the (service) product starts to be more mature and the company wants to grow the volumes

as well as expand to new markets. This is also supported by all of the cases (see **Table 12.**).

**Table 12.** Comparison on the growth stage channel strategies.

Case	Multiple channels	Activities divided	Channel types	Intensity / coverage	Standardization
<b>Case A</b>	<p>Hybrid (multiple) channel distribution:</p> <p>Direct distribution through company's own channels</p> <p>Indirect distribution through value providers</p>	<p>Supporting each other through the common support platform</p> <p>Customers can hand over the product care for the manufacturer</p>	<p>Own sales force (service and product sales)</p> <p>Value providers' sales force</p> <p>E-service through browser</p> <p>Internet site for brochures and information</p>	<p>Selective value provider distribution</p> <p>Further penetration and coverage</p>	<p>Standardized distribution:</p> <p>Service needs to be local or at least regional</p> <p>Different languages in the portal</p>
<b>Case B</b>	<p>Dual (multiple) channel distribution:</p> <p>Direct through company's own channels (new and old products)</p> <p>Indirect (new sales)</p>	<p>Overall in services: High-end services performed by manufacturer</p> <p>Low-end service by low-cost service providers</p> <p>Products sold also through EPCs</p>	<p>Own, OEM's and EPC's sales force, Distributors sales force in the US</p> <p>E-service through browser</p> <p>Internet site for information, movies, events</p>	<p>Intensive distribution</p> <p>Expansion to China, South-Asia and Middle East</p> <p>Further penetration in North America, Europe, Brazil</p>	<p>Adapted distribution:</p> <p>Different markets targeted with different distribution strategies (US distributors, exporting to China)</p> <p>Different language options for biggest languages considered</p>

<b>Case C</b>	Hybrid (multiple) channel distribution:  Direct distribution through company's own channels  Indirect distribution through distributors	Intermediaries are used for service component sales and the manufacturer gives technical support for sales  Intermediaries are used in the product channel	Own sales force, distributors' sales force, telesales trial for low price category  Electronic service is accessed by any device  Internet site for information, events	Selective distribution through distributors  Increase coverage  North America, Europe and Middle East in focus and Africa	Standardized distribution:  Languages have to be considered
<b>Case D</b>	Hybrid (multiple) channel distribution:  Direct distribution,  Indirect distribution through integrators and distributors	Manufacturer creates market pull  Distributors take care of simple tasks and keep stock  Integrators are used for more complicated tasks	Company's, integrators' and distributors sales force  E-service through browser on any device  Internet used for promotional material  Events for information	Selective distribution through partners  Increasing intensity and coverage, penetration to less advanced segment	Adapted distribution:  Reaching different market segments with different distribution channels (advanced, less advanced)

**Multiple channels:** As the product and market matures, the companies are choosing between dual (parallel) and hybrid (integrated) distribution. Case A states that they use their value adding partners for some activities, for example, selling and installing the service component. The parties share a common support platform (service portal), with possibility to cooperate and support each other. Case B continue to use dual distribution for the reasons stated in previous section, and they see that EPCs are good addition to distribution. Furthermore, they state that they are using distributors on the US market. This might mean that if these intermediaries require support and the channel benefits from cooperative distribution structure, a hybrid channel might emerge. Case C will have a hybrid channel, where intermediaries are used for selling service component and the manufacturer supports the process with technical help and installation. Channel integration is similar to their product sales channel. Case D has a hybrid channel, in which the manufacturer continues to create market pull and serve advanced customers directly or through integrators. They use distributors as they are highly important partners that

allow serving diversity within their customers. Thus, it can be stated that when companies have partners, they are willing to utilize them to gain partnership advantages. As more markets are sought to be penetrated, diversity of customers increase and local knowledge, presence and relationships are needed. It can be concluded that multiple channels become more interesting as local relationships and market diversity can be served through them.

**Channel types:** All of the cases continue using sales force as their main channel type for sales, was it their own, OEM's, integrator's or distributor's sales force. These different intermediaries handle their own value-adding activities, which are divided by their ability to best create value within the channel. Distributors seem to be the best for handling more simple tasks and addressing customers locally through hybrid structure, thus maintaining medium control for the manufacturer. Whereas, the other, independent channels offer increased coverage, but enable less control. These channel decisions enhance complementarity within the channel network. Furthermore, as states previously, intermediaries' competence and skill level related to the service product affect distribution. Thus, it can be stated that when the product-technology is new, it is better to be sold through, for example, direct channels as well as OEMs and integrators. Furthermore, when maturity increases and volume is wanted to be increased, it can be taken to the less competent distributor channels as well, preferably through hybrid channels.

**Intensity and coverage:** The cases A, C, and D are pursuing selective distribution through partners. Partners have distinct areas or segments that they serve to avoid channel conflicts as manufacturers want to limit channel competition, but not all of it. For example, it was stated by case D that some amount of competition is wanted to avoid complacency. They all consider partners being highly valuable and thus they want to nurture the relationship and assure that the intermediaries benefit from selling their portfolio of products and services. Case B, however, did not want to restrict intensity of distribution, as their product is suitable for all core products on the market and as the market is quite mature and competitive. All of the cases are pursuing increased intensity, coverage and market share in their chosen target markets and segments, but they are also seeking to penetrate new ones. They have penetrated markets that are more mature and in which there is interest to sell the service product. So, volume and market share is sought to be increased further and expanding to less mature markets is a logical next step. There are increasing market demand, for example, in Asia and South America.

**Standardization:** Case A seeks standardization, but they admit that offering local service requires local responsiveness. They, thus, offer different languages in their portal and would see service partners beneficial in the future. Furthermore, they acknowledge that serving smaller and large customers in different ways is important to penetrate also the large customer segment. Case D is reaching different segments with different strategies. This is due to the fact that the segments have different needs and they perceive value of remote condition monitoring service differently. Case C seems to have standardized plans to penetrate different markets, although they state that they have to remain responsive to differences related to market and culture. Case B is targeting different markets with different distribution strategies, in the US it is using distributors because the US organization lacks resources, but also, because distributors have been successful in the past. It has also researched that exporting to China would be the most suitable decisions as otherwise the Chinese market is hard to penetrate. In addition, all of the case companies agree that language differences must be considered and adapted to, but only for major languages if requested. All the case companies are still on fairly limited areas (mainly North America and Europe) which can be stated to decrease amount of diversity between the markets. However, it is evident that further in expansion, they are adapting the distribution strategies more.

#### 4.2.3 Comparison on the future channel development strategies

The companies are further pursuing to grow through multiple channels. Internet sales are still in the future, but they are considered as a possibility to complement channel choices, when the service product is less complex. The other companies did not have significant Internet sales established, but Case D stated that they have good basis for selling also the service product through the Internet as they already have some product sales in the Internet. The core products in the less advanced segment are enabled in the growth stage, which causes that the service product is simple enough to be sold on the Internet. Case D was also the most determined case to sell through Internet, probably due to earlier experience. They stated that they will start pursuing Internet sales soon after the core products are enabled. The reason why the companies are not currently pursuing Internet sales is that they do not have the infrastructure, resources and the market is not ready for Internet transactions yet. However, all of the cases state that the most valuable customers should still be served mainly through personal channels, even though some standard purchasing processes can be facilitated through online environment, for example, for frequently buying OEMs. In addition, case A is going to develop and start selling additional services in their portal.



Furthermore, the companies are currently discussing whether to utilize distributors also for service activities. Case D already uses distributors in selling simple service packages and they also handle low-end services. Case A also state that service partners are needed to continue growth and to support customers in the future. The intermediaries would most likely to be used for low-end service as they want to keep the more advanced tasks in their own control, but also because the distributors are not very interested in service. In addition, case C has stated that training the distributors for some tasks related to service product distribution would be possible, but requires further strategic choices. Case B has stated already that low-cost service providers usually handle low-end services, whereas, it supports them with more advanced service, however, they do not have service partners.

## 5. FINDINGS AND DISCUSSION

Here the findings from the analyses are discussed. First the factors affecting distribution strategies are discussed and then the hypotheses are tested. Finally, the results of the research are discussed to conclude what has been found and whether some generalizations can be drawn from the results.

### 5.1 Factors affecting distribution strategies

The theoretical approaches chosen for this research seem to be complementing each other very well and each approach is able to explain a significant effect on distribution strategy decisions (see **Table 13.**). Value in relationships explains whether hybrid or dual distribution is used, but also other distribution strategy decisions, like how intensive distribution they pursue and which segments or markets are the best served through each channel member. Whereas, product-technology explains that technical skills of intermediaries are important when the product is complex and new (or in solution stage) and determines whether the service product can be distributed through intermediaries and which types of channels can be utilized. It also reflects to intensity decisions and in which markets it can be sold. Finally, market diversity affects how distribution can be organized and strategy realized in different markets. Thus, it explains whether a standardized approach can be applied and if multiple channels and types are needed to serve diversity.

**Table 13.** Factors affecting distribution and effect on distribution strategy.

Approach and factors affecting distribution	Effect on distribution channels
Value in relationships (Partnership advantages, cooperation, ability to utilize existing multiple channels, complementarity)	Affects whether multiple channels are preferred and dual or hybrid channel structure is used, which types of channels are pursued, how intensive distribution is targeted and which markets are served through which party.
Product-technology (Maturity, complexity, demand, customization needs)	Affects whether the service product can be distributed through certain types of multiple channels, how intensive the service product can be distributed and on which markets.
Market diversity (Market differences, amount of markets, diversity of customers)	Affects how distribution can be organized and strategy realized in different markets and thus whether standardized approach can be applied.

In the table below (see **Table 14.**), the utilized theoretical approaches and related factors affecting multichannel distribution are covered in more detail. Multiple channels are used for partnership advantages such as market expansion and volume, however, if intermediaries are not skilled enough, direct channels are used. Thus, even though the company would otherwise sell products through intermediaries, they might not utilize them to sell the service product in the beginning, because they cannot add value. However, the service products can be distributed through intermediaries in the beginning, if they have great enough skills to install and configure the service product. They might have to be influenced through customers as value might not be perceived as well by the OEMs or integrators chosen for this task. These skilled intermediaries are harder to promote the value to and they are not working cooperatively with the manufacturers, and thus dual channels are used. Whereas, distributors as intermediaries are more often seen as a partner in distribution and can be utilized in hybrid distribution. This is affected by the lack of skills or resources they have, but the manufacturers also want to retain their technical competence and thus mainly supporting tasks are offered to them.

**Table 14.** Factors and their effect on multichannel decisions.

Approaches and factors	Direct channels if	Dual distribution though skilled intermediaries if	Hybrid distribution if
Value in relationships -Partnership advantages -Cooperation -Complementarity	(Low) (Low) (Low)	Moderate Low Moderate/High	High High High
Product-technology -Maturity -Complexity -Demand -Customization needs	Low High Low High	Low/Moderate Moderate/High All levels Moderate/High	Moderate/High Low/ Moderate Moderate/High Low
Market diversity -Market differences -Amount of markets -Diversity of customers	Low Low Low	All levels All levels All levels	Moderate/High Moderate/High Moderate/High

The distributors are used when the service product is further in maturity, needs less customization and if the manufacturer can provide support in installation and configuration. Their importance is highlighted when the service product is integrated in the core product. Especially for distributors, market demand should be high enough to

cover costs of sales. Whereas, the importance of skilled intermediaries continue to be high as long as the service product can be sold through them to manufacturer's or competitors' core products to which customers require the service product.

When market differences, amount of markets and diversity of customers is low the manufacturer can serve the customers through company-owned direct channels. This happens especially on the introduction stage of the service product as number of penetrated markets are low, usually sold on similar markets in the beginning and the demand for the service product is not great. Dual channels are mainly used to serve diversity of customers and can be used from introduction stage due to their high skill level and special demand that comes from the customers. Hybrid distribution is used when market differences, amount of markets and customer diversity is moderate or high. This is also based on the fact that manufacturers consider them as partners, and need them to expand their reach and increase volume, as well as in offering local contact for the end-customers.

## 5.2 Testing hypotheses

In this section the hypotheses are examined. The hypotheses are presented one by one and the fitness of the statement is tested by comparing it to the findings from the case studies and reflection to theoretical framework. In case the hypothesis is supported, it is considered being validated and if the hypothesis is not supported the researcher revises the proposition. In both cases, discussion between the actual hypothesis and the data is pursued. First, the hypothesis is presented and after that the robustness is discussed. The hypotheses are categorized according to theoretical focus.

### **Value in channel relationships**

**H1a.** Multiple channels (hybrid/dual) are used when there are partnership advantages that can be achieved.

**H1b.** Dual channel emerges when the relationships with used intermediaries are more transactional and cooperative partnerships do not exist.

**H1c.** Hybrid channels are more common in a channel where the manufacturer and intermediary have close, cooperative relationship and are considered as partners.

Local presence and relationship of intermediaries with the end-customers affected the case companies' choices of utilizing multiple channels positively, which is also supported by literature. Chung et al. (2012) have proposed that good relationship between intermediary and end-customer, as well as the relationship between intermediary and manufacturer affect multiple channel choices positively. The cases state that the intermediaries are important in maintaining local relationships and serve diversity, which the manufacturers would not be able to do. They are also used for increased volumes. However, there are factors that affect the choice between dual and hybrid multichannel structure (Gabrielsson & Gabrielsson 2011). Case B had a dual channel where the relationships are more transactional and cooperative partnerships do not exist. Case B does not have partners for distribution, mainly due to market related reasons – they chose to distribute their service product through intermediaries that are competitive in product business, but not regarding these service products. They used the dual channel for expansion and reaching more customers. Also, case D used intermediaries at first in dual formation as they could to use only integrators in the beginning due to their distributor's (partner's) limited capabilities.

However, value in cooperation and collaboration within the channel can reduce transaction costs and increase long-term benefits through trust, information sharing and commitment (Pardo et al. 2006). As stated in the hypothesis H1c., hybrid channels are more common in a channel where the manufacturer and intermediary have close, cooperative, relationship and are considered as partners. Manufacturer gains partnership advantages, for example, larger coverage on different markets. This is the setting with the cases A, C and D which were using or intended to use partners and regarded the partnerships to be highly important. Channel- and market-level information acquired through cooperative relationships is suggested to be important and it is proposed to help meet customer needs and enhance efficiency in the channel, which increases the value in the whole channel system (Sa Vinhas et al. 2010). Hypothesis H1a., H1b. and H1c. can thus be stated to be supported as all of the cases listed several partnership advantages as their motivation to use multiple channels, either through dual or hybrid structure, respective to their channel relationships.

**H1d.** Already existing multiple channels for products and services increase the probability of using multiple channels, when launching new service products.

Utilizing existing channels is less costly for the manufacturer than establishing new channels (Evans & King 1999). It is also stated that once a channel structure is decided,

it reinforces itself, making it easier to follow the earlier decisions than to make changes (Sa Vinhas et al. 2010). Case B stated that they use their own channels because they are already established. As we can see from the channel development, it can also be claimed that using existing channels as path for new products and services is more probable, because of the already established relationships and trust (Dwyer et al. 1987). This is obvious with cases A, C and D.

Even though the studied cases A, C and D did not use their intermediaries in the beginning or utilized just part of them, they wanted to start using the intermediaries to distribute also this service product. It is claimed that time and shared experiences are a basis for a long-term cooperation and can be seen as glue between the partners (Li & Dant 1997: 205), which seems to be supported by the study. Furthermore, not only manufacturers benefit using the established channels for new products and services, but the intermediaries can gain more revenues from the new products and service sold through them and customers can use the channels they are accustomed to buying from, to mention some examples. The findings also supported suggestion of importance of established channels by Evans & King (1999). Thus hypothesis H1d. can be stated to be supported as all the cases highlighted the importance of utilizing already existing multiple channels and considered expansion through them first, before starting to utilize, for example, Internet channels or other intermediaries.

**H1e.** The tighter the (hybrid) channel partnerships are, the more the manufacturer will pursue to restrict intensity of distribution to avoid major channel conflicts.

It is stated that to avoid conflicts between the intermediaries the manufacturers may have to restrict intensity (Palmatier et al 2015: 163 – 179). Cases A, C and D pursued selective distribution to avoid conflicts. Whereas, case B lacks partnerships and it states to pursue selling the service product intensively. However, it also stated to utilize distributors on the US market, so if the relationship is partner-like, it might start developing a hybrid distribution also for this service product, to better serve the market. Also, case D stated to allow some competition in the territory to enhance competitiveness. This is one of the choices that can be made to avoid complacency within the channel (Palmatier et al 2015: 163 – 179). Additionally, pursuing to create market demand to generate sales for the intermediaries is common in hybrid distribution (Gabrielsson & Gabrielsson 2011). In literature, it is stated that in some circumstances overlapping presence of the manufacturer in intermediary's territory can increase satisfaction of the intermediary (Sa Vinhas, Gibbs & Anderson 2008). This was evident also in case D, where the manufacturer creates

demand within the territory or case C supports intermediaries in more advanced tasks. Thus, it can be stated that H1e is supported as cases A, C and D pursued selective distribution to avoid conflicts, whereas, case B pursued intensity when not having partnerships to utilize in distribution. Also, it can be stated that controlled amount of overlapping in territories can be helpful to avoid complacency or support each other in different tasks.

**H1f.** The better value creation related aspects within the channels are understood and considered the more value can be created.

It is hypothesized that complementary value creation facilitating activities affect multiple channel choices positively (Chung et al. 2012). This is also stated by the case companies, who see that the different channel members create value within the chain. Value can be derived from manufacturer's and intermediary's inputs to the business relationship (Chung et al. 2012). Manufacturer creates value through generating market demand, offering its knowledge as well as creating attractive products and services. Intermediaries gain revenues from the products and services sold through them, but they also create value through handling tasks assigned to them. Also, intermediaries have closer relationship with customers and are serving them locally, so they are seen as an important link in maintaining relationships with end-customers. Furthermore, customers can benefit through enhanced service and availability (Evans & King 1999), but they can also have a role in value co-creation by using electronic service and sharing valuable data with other channel members (Scherer et al 2015). As stated earlier, the main tenet of service-dominant logic is that value is co-created, while it is context related and contingent on resources on the market (Lush & Vargo 2014). As also stated by the cases, value adding functions, service outputs, and previous success with intermediaries encourage the manufacturer to use them when marketing a new service product.

Value can be derived from manufacturer's and intermediary's inputs to the business relationship (Chung et al. 2012). Thus, the distribution channels that have hybrid structure can utilize skills within the channel to create more value to the customer, or even together with the customer. Even within a dual channel all of the parties must create value, otherwise they would not be used. Case B uses intermediaries to increase availability, whereas the intermediary provides a channel for the manufacturer and enables end-customer with an integrated solution. Furthermore, the customer can purchase the product where they accustomed to and who they trust. However, they were not sure about the value that could be proposed to these OEMs and thus struggled to sell it through them.

As stated by case D, they need integrators to handle more complicated tasks, but also the distributors to offer service and broader reach. This is a great example of complementarity within a channel, as all of the channel members are handling their own tasks, in which they are most effective in, to add value as also suggested by Grönroos and Helle (2010). The research proposed benefit of the online service platform is considered to be the ability of the channel members utilize it for different support purposes. They may either use it individually or co-create value in cooperation. The benefits of self-service is not only for the service provider, but also for the customer in terms of convenience in accessibility and availability, as stated by the case companies, and supported also by Collier and Kimes (2013).

In addition, Scherer et al. (2015) present that the companies should not force customers to use only the self-service channels, but pursue to understand how and when the new technologies create value and offer valuable experiences. They also claim that especially in the beginning of the relationship, there should be personal contact offered (Scherer et al. 2015). This can be stated to be supported as all of the cases utilized personal sales contacts as their first step on the market. Furthermore, the companies are also planning on building consulting services or are already offering them to provide the best possible service configuration. For example, case A is offering the service as a part of a service agreement and thus tries to incorporate the best features of electronic service and direct contact. It seemed that the cases A, C and D understood and considered value for customer and intermediaries extensively, which can also be due to cooperative channel setting. Whereas, case B was not so sure how to propose value, what it would be for the intermediary and had to influence them only through customers. Thus, it can be stated that hypothesis H1f. is supported.

### **Product-technology maturity**

**H2a.** Product-technology maturity affects distribution decisions by the service product being either directly or indirectly distributed through sales force when the service product is in introduction stage.

**H2b.** On growth stage dual channels are utilized.

**H2c.** When the service product gains greater maturity, multiple channels, different types and higher intensity in distribution can be realized.



Gabrielsson et al. (2002) state that the biggest benefit of the product-technology life cycle seems to be that it is able to address the development aspect of the channels. The development in market and product maturity seems to affect also case companies in this research. For cases A and C the hypothesis H2a. is supported and the product-technology life cycle explains channel development from direct channels into multiple channels, which enables expansion and offering the service products for larger number of customer with broader coverage (Lele 1986). At the introduction stage customers need heavy support as the service product is needed to be installed and commissioned and thus direct contact is needed through manufacturer's sales force (Palmatier et al 2015: 163 – 179). In addition, distributors might be reluctant or incapable to develop product and market specific knowledge, so they cannot offer the same level of expertise and support as the producer (McNaughton 2002). This is supported by both cases as they do not have capable distributors to respond to the customers' needs. Cases A and C state that different intermediaries should be trained before they can start distributing this product, so it is better to start with their own sales force. As stated by Rao and Klein (1994) the companies must consider installation, training, maintenance and upgrades as a part of their post-sales service that also is an important criteria for the customer.

McNaughton (2002) claimed that diversity on a mature market, meaning a market with various customers and competitors, is positively related with multiple channels. Case B and D have a service product, which includes hardware and software applications that require system integration skills from intermediaries. The research showed that that markets were not yet mature for the service product as especially Case B stated to have difficulties in selling it. Furthermore, for case D and its market, the product-technology is still new and they were selling it to the early adopters in the introduction stage. However, they stated that it can be sold through the intermediary sales force that is capable of integrating the component into the core product. Case B uses OEMs and case D uses integrators in its channel, as they are quite advanced and able to integrate the component to their offering. The hypothesis H2a. is, thus, not supported by these two cases. It seems that the companies can choose dual channel, already in the beginning if they have a solution-based service product which intermediaries are skilled enough to integrate into their offering, even though the market would not be ready for the product-technology. Dual channel, not hybrid one, is chosen because of newness of the service product and lack of cooperative partnerships with the capable intermediaries, otherwise also hybrid channel would be possible.

When the market is on growth stage and service products become more mature the case companies A and C started to use hybrid channels to increase the volume as well as intensity and coverage of distribution. This is supported by existing channel network and the partnership advantages that can be created through that decision, but also to avoid conflicts in distribution. The finding contradicts with Lele's (1986) product-technology model as it suggests the use of dual channel. Case D also moves towards hybrid channel with distributors to gain partnership advantages, whereas case B continues to use dual channel to compete on the quite mature market, however, in future channel integration may be realized as they are involving distributors. Also, case A, B and D are looking forward to Internet sales. We can now state that hypothesis H2a is supported only partly and H2b is not supported. However, it can be stated that hypothesis H2c. is supported as the companies pursue multiple channels, multiple types of channels and greater intensity when the product-technology becomes more mature.

As the manufacturer can pursue directly dual channel distribution if it has suitable intermediaries with high skill level and the market becoming mature, the following changes are proposed to product-technology life cycle proposition (changes in *italic*): **Modified H2a.** Product maturity affects distribution decisions by the service product being either directly or indirectly distributed through sales force when the service product is in introduction stage. *However, if the intermediaries are skilled enough, the service product can directly be started to be distributed through dual channels.* **Modified H2b.** On growth stage *either dual channels or hybrid channels (if there is an existing partner network)* are utilized. On maturation multiple channels are used, different channel types are introduced and higher intensity and coverage in distribution can be realized.

**H2d.** If the service product is truly digital in nature and/or has low support needs it can be sold through Internet.

**H2e.** System product is more likely to be sold in conventional channels, as Internet has a limited capability for substituting conventional sales methods in selling complex solution.

It is stated that services that are digital by nature and do not require physical elements can be easily sold via Internet (Gabrielsson & Gabrielsson 2011). This is also supported by case D, which claims to start pursuing Internet sales as soon as the service component is integrated into the less advanced segment products. Also, already established Internet sales channels contribute to this decision (Sa Vinhas et al. 2010). However, the company does not want to sell the service to the advanced segment through the Internet because

they want to configure the service for the customer's needs to create more value. Also, even though it is possible considering the simplicity of the service product, case B prefer selling the service product in conventional channels, as they would like to sell the service packaged with another one to provide a complete solution. Also, cases A and C stated that Internet sales might be possible, but case A believes that service is a 'people business' and case C does not have the resources, but also thinks that more value can be created through personal interaction.

There are certain benefits in new self-service channels, but also in the conventional, personal channels. It is stated that personal service channels increase trust, allow customization and close relationship between the customer and the service provider (Barnes 1997). It is claimed that the value created through both of these channels vary and thus substitution is not feasible (Kumar & Telang 2012). It is even stated that if self-service channels are used to completely substitute the personal service channels, the result might be harmful by decreasing customer loyalty (Selnes & Hansen 2001). This can be also claimed to be true within the case companies. All of the case companies realize the value in channel relationships when selling a solution. Mostly they state that the nature of the product is better supported through conventional channels, where value can be better described and security can be demonstrated by experts (Bendapudi & Berry 1997). In addition, as the service components are not yet integrated to all of the products by default, so they have to be installed and configured (Gabrielsson et al. 2002).

Cases A and C do not really consider Internet sales at the moment, because they want to have interaction with the customers and consider conventional channels creating more value. Furthermore, previous literature is argues that Internet as a channel cannot replace the traditional forms completely as sometimes it is needed to have a direct contact with a sales person, and also because the buyers cannot examine the products physically in Internet environment (Rosenbloom 1999), especially security related concerns are stated to be the best addressed with personal sales contact. Thus, it can be stated that H2c. and H2d. are supported as low support needs and nature of the product enable sales in the Internet. However, system product that needs to be installed, configured and has electronic service element is considered to be difficult to sell through the Internet. This is due to the fact that more value has to be promoted in the sales situation, but because also security aspects must be addressed.

## **Market diversity**

**H3a.** Expanding to new markets increases diversity and thus the probability of utilizing multiple channels.

**H3b.** Greater market diversity leads to more adapted strategy when distributing service products.

Case A, B and D state that they have diverse markets or segments that require adapted channel decisions and they acknowledge that market and culture related aspects must be considered in distribution decisions. Even though cases A and C used single channels in introduction stage, they started utilizing multiple channels to serve the customers better and to gain partnership advantages. All the cases state that they can serve market diversity better through multiple channels. There are small-, medium- and large-sized customers, which can be served better locally by developing multichannel strategies. In addition, different markets vary in their structure and have culture related demands. For example, case D is using its own and integrator's channels to serve more advanced segments and distributors to cater the needs of less advanced segment. Furthermore, case A wants to use its channel partners to enable value creation within the channel. It can be thus stated that market diversity has affected multichannel decisions.

At the moment adaptation level is rather low, but this is claimed to be due to restricted coverage on international markets. There are arguments against standardization and according to Dimitrova and Rosenbloom (2010) cultural differences and economic, political, social, competitive and technical developments as well as types and sizes of intermediaries not performing same functions between countries are a barrier against standardization. Whereas, standardization enables economies of scale and scope, but also control and coordination over the marketing activities (Levitt 1983). Especially, when there are global segments that have been identified standardization comes feasible (Chung 2005). The companies can be stated to pursue standardization, but they acknowledge that market related factors cannot be overlooked. Thus they are identifying channel adaptation needs on different segments or markets and standardizing according to segment. Legalities and local business practices can also restrict certain channels or interfere exclusive sales agreements (Douglas & Wind 1987). This is evident in case C, as they claim expansion to Gulf region be restricted due to various standards and codes.

Especially languages and locality in service is considered to be important. This is why distributors are regarded important in all of the cases and are incorporated in the distribution strategy on certain markets, even though they would not otherwise be used. An example is case B, which stated to use distributors on the US market, even though it does not use distributors to distribute the service product in other markets. Also, case D stated to utilize adapted channel strategy according to identified segments to better serve their diverse customers and diverse products. As also stated in various interviews, so called, global-local dilemma is significant and the companies must decide whether to sell products and services in a standardized manner or adapted according to the market (de Mooij 2014: 11). Thus hypotheses H3a. and H3b. can be stated to be supported as the cases are adapting their strategies when the amount of markets increase and if cultural, market environment or market structure related differences exist.

### 5.3 Discussion of the findings

The study aimed to examine which factors affect distribution strategies and what are the impacts on channels. Especially, value in relationships, product-technology maturity and market diversity were proposed to affect distribution. This section will discuss the findings. All of the cases listed several partnership advantages as their motivation to pursue to use multiple channels, either dual or hybrid, respective to their channel settings. Motivations to use multiple channels can include: customer satisfaction and loyalty, creation of strategic advantage as well as low-cost access to new markets (Zhang et al. 2010). Also, access to knowledge, sharing of risks and access to complementary skills are important (Powell 1987). Thus, partnership advantages can be stated to be important also when distributing a system product, like remote condition monitoring solution. This is, supporting earlier findings of different studies (eg, Chung et al. 2012; Gabrielsson & Gabrielsson 2011), as the results also support the claim that even though Internet strategies would be realized, the reliance of intermediaries remain strong, mainly due to support needs the customers have.

Dual channel was used if manufacturer did not have partners that would distribute the service product. Gabrielsson et al. (2002) claim that dual channels suggest increased amount of possible conflicts that can be overcome by the power of the manufacturer. The manufacturer can use power if it has remote condition monitoring, unlike the competitive intermediaries and by having influence on customers and creating demand. Furthermore, case B did not restrict the intensity of distribution as it stated that market is quite mature and competitive, but it can be also claimed to be due to not having partnerships to utilize

in distribution. Gabrielsson et al. (2002) claim that hybrid channels would be chosen for increased amount of partnership advantages. Hybrid structure was utilized, when the partnerships allowed it, so that the customer could receive support from a suitable and skilled source. In hybrid multichannel distribution the manufacturer would delegate some of the less advanced services to intermediaries and handle more advanced services independently. Cases A, C and D that pursued hybrid distribution in growth stage also pursued selectivity in distribution to avoid conflicts. It was evident that case companies favor increasing vertical integration when pursuing intensity and larger coverage globally.

All of the cases highlighted the importance of utilizing existing channels and pursued expansion through them as a first option. In case of hybrid channels this highlights the importance of relationships and stickiness between the partners (Zott et al. 2000). Trust and commitment are required for cooperation in hybrid channels (Gabrielsson et al. 2002) They were stated, also by the case companies, to be very important in relationships between the channel members in hybrid distribution, but also between customer and intermediary in dual distribution. Also, as it is expensive to set up new channels (Evans & King 1999), using existing channels is valuable for the companies. The manufacturer can utilize existing channels, and also to create new type of offering for the intermediaries to sell and thus make the product portfolio more attractive (Chung et al. 2012). In addition, the customer base can start purchasing the service product from the channel they know, which adds value through convenience and advanced offering (Hollensen 2007: 504).

The study also shows that the channel decisions must create value for the channel participants, in which existing channels have a great role. Additionally, value creation must be considered in multiple channel decisions to deliver needed quality of service and support and having most suitable channel types to serve the customers. Furthermore, intensity and coverage have to be considered so that all of the channel members gain value. Within the channel there should appropriate amount of competition and the members must gain sufficient revenues or other benefits. Standardization considerations must ensure that the markets receive needed level of local services as well as responsiveness. The choices must add value through complementarity and effectiveness (Grönroos & Helle 2010). There is thus evidence that channel strategy and value in relationships are related as claimed also by Chung et al. (2012) and Sa Vinhas (2010).

Even though it is common for the manufacturing companies to start distributing their products through direct or indirect channels first (Lele 1986), it can be stated, though, that if the manufacturer has suitable intermediaries with high skill level and there is some

demand on the market, it can be started to be sold through dual structure in the beginning. As stated before, dual structure is used when there is limited amount of cooperation, because of existing competition between manufacturer and skilled intermediary. The service product characteristics may have an effect, as it is designed as a value adding service for core products and thus it is reasonable to sell together with the core product and utilize the existing channels. On growth stage either dual channels or hybrid channels (if there is an existing partner network) are utilized. It can be proposed that as maturity increases multiple channels are used, different channel types are introduced and higher intensity and coverage in distribution can be realized.

An interesting result was that none of the cases used Internet in other than service product information and contact inquiry related communication. As stated in earlier research, suitability for Internet sales depends on the product characteristics and the nature of the product must support Internet sales. Gabrielsson and Gabrielsson (2011) claim that system products are not very suitable for Internet-based sales. This is supported by the research. These service products (are system products) that need to be installed and configured are considered to be difficult to sell through the Internet as more value has to be proposed in the sales situation, but also because security related aspects must be addressed due to wireless connectivity. However, when the product is less complex and certain segments are familiar with Internet sales, they can be realized to serve better the customers (Laudon & Traver 2010: 6-16). It is also state that software and digital services can be more easily sold via Internet if they are truly digital (Gabrielsson & Gabrielsson 2011). The manufacturers pursued integrating the service component into their core products to make the remote condition monitoring service simpler for the customer. Thus, system product can be stated to be difficult to sell through the Internet due to value propositions and security issues, in which Internet has a limited capability for substituting conventional sales methods. Whereas, low support needs, simple installation and configuration and digital nature of the service product enables Internet sales.

Tepstra and Sarathy (2000) claim that even though there are global similarities, some dimensions still vary between cultures and countries, which force the companies to adjust their strategies accordingly. Market diversity seems to have an effect on the global companies' distribution and following standardization strategies. A reason why manufacturers have not had to adapt the strategies more, can be that they are still marketing the service products on a quite restricted areas. Companies are expanding usually gradually to similar areas as their home market (Johanson & Vahlne 1977). When the companies are expanding they are facing, for example, legalities and market structure

related issues (Douglas & Wind 1987; Dimitrova & Rosenbloom 2010). Especially, case C faced issues with certifications in the Gulf region, case B has identified the importance to use different strategy on the US market and the Chinese market had to be penetrated in an adapted way due to high competition. Additionally, it seems that language and local service needs are important factors that affect distribution. Adaptation need is created when the customers in different markets or segments expect having differentiated effort regarding the electronic service, additional support (onsite and remote services) and service customization. As stated before, homogenous submarkets can be identified through segmentation which also enables positioning according to the segments (Shoham 2002). This can be stated to be clear also for the cases, as they pursue distribution adaptations considering segments or markets to avoid much adaptation.

An interesting finding, although not in the in original focus of the research, is that all of the case companies are facing issues with their internal sales people. The sales people do not have the competence or interest to sell the service products, or both. Also, an issue is that the product sales people do not cooperate with internal service sales team. The main reason for this is that the companies do not traditionally sell these kinds of service products and the product sales people are more focused on product sales, which is aligned with earlier research of Kindström, Kowalkowski and Alejandro (2014). The sales force is more confident in selling what they already know and not selling value of the service product that would increase the price. Also, it is stated that proactive behavior differs between the markets, which can be related to individual and cultural aspects. Sales, thus, requires change in mindset to start thinking more what value the service product can offer for a customer. Training might enable both product and sales people to be more confident. In addition, incentivizing service for product sales people and having specialized sales force are stated to be an option for a solution, which was also stated by Kindström et al. (2014).



## 6. CONCLUSIONS AND RECOMMENDATIONS

In this section the main findings and key outcomes of the research are summarized. After that theoretical implications are discussed to explain whether the research questions were answered and how the research contributes to the existing literature as well as whether it has provided some new insights to the studied topic. This is followed by managerial implications, pondering what the research results mean to the service product managers and marketing managers distributing their remote condition monitoring solutions. Finally, the limitations and future research directions are presented.

### 6.1 Summary of the findings

To summarize the findings multiple channels are chosen for partnership advantages, for example, access to knowledge and low-cost access to new markets. Long-term partnerships between the channel members affect the choice of hybrid channels positively, and limit the intensity of distribution. Furthermore, dual channel is selected because of the competitive setting within distribution channel. The study also shows that the channel decisions must create value for the channel participants. Value creation must be considered in multiple channel decisions, channel types, intensity and coverage as well as standardization considerations. The choices must add value through complementarity and effectiveness. Existing channels have a great role for the manufacturer, but also for other channel participants due to, for instance, established relationships and cost savings.

Also, the product-technology maturity affects distribution decisions. In introduction stage the service product is either directly distributed through sales force or dual channel is utilized. Thus it can be stated that, if the intermediaries are skilled enough to install and configure it and have special demand from the customers, the service product can directly be started to be distributed through intermediaries. On growth stage either dual channels or hybrid channels (if there is an existing partner network) are utilized. When maturity grows, there is increasing use of multiple channels, different channel types and higher intensity and coverage in distribution. Also, one affecting aspect seems to be market diversity, including market characteristics, competition, amount of markets and diversity of customers on the market. Furthermore, the diversity is able to explain utilizing multiple channels in distribution and standardization decisions.

System product can be stated to be more difficult to sell through the Internet as more value has to be proposed and security related aspects must be addressed in the sales situation. Thus, Internet has a limited capability for substituting conventional sales methods for these service products. Whereas low support needs, simple installation and configuration and digital nature of the service product would enable Internet sales. It is also clear that different types and proportion in use of direct and indirect channels had a bigger difference between countries than in actual level of strategy (direct, indirect, dual or hybrid) between the markets. Also, between different markets there is some variation in the levels of proactiveness, which was stated to relate with individual and cultural aspects. Selling more may require change in the mindset to customer orientation and value, but it also requires training to enable both product and sales people to be more confident. These findings can be stated to support contingency theory of distribution channels.

## 6.2 Theoretical implications

The empirical research utilized multiple cases to produce more generalizable findings than a single case would have been able to generate. The case results mainly apply to manufacturing business to business industries in high-technology field. Therefore, conclusions for the channel strategies are most likely to be applicable in similar contexts that were studied here. The case companies are marketing remote condition monitoring services most intensively on European and North American markets, so implications related to companies conducting international business in these areas can be stated to be strongest. The results can, however, be utilized by academics to further study multiple channels and test the findings in all industries and geographical areas. This research can be stated to develop the knowledge about fairly limitedly researched areas: value in multiple channel relationships, Internet as a channel in B2B system sales and especially distribution of remote condition monitoring services. The study contributed to multiple channel choice literature by relating it to remote condition monitoring services context, examining product-technology maturity and market diversity related aspects. This study contributed to a research gap identified by Sa Vinhas et al. (2010) as they had concluded that there is a need to investigate multiple channel choice related to special context, for example, product complexity and market turbulence (Sa Vinhas et al. 2010).

The first research question was “(1) What kind of international distribution channel strategy alternatives are available for high-technology companies offering IoT enabled innovative service products and how they evolve?” This question was answered through

individual and cross-case analyses about current decisions and channel development. These strategies seem to be either direct or dual distribution strategies at first and then developing into more cooperative hybrid channels or continuing with dual strategy to enable expansion, growing volumes and gaining market share. When they start seeking larger volumes the companies tend to increase utilizing multiple types of channels on all of the markets or on different markets to better serve different customers. With these channel decisions they also intend to increase intensity and coverage. In the earlier stages channels are rather standardized, but when more markets are penetrated, adaptation pressure increases.

Vargo and Sinhav (2015) state that Internet-based channels have a great impact on productivity, but they also have implications for vertical and horizontal conflicts, which should be further studied. This research highlights the fact that, through the service the companies do not pursue to bypass the intermediaries, but they rather plan to use the intermediaries to sell the service products or provide additional service so the intermediaries also gain benefits through increased sales opportunities and thus creating value for all of the channel members. So the service product supports traditional sales instead of pursuing contact only through Internet portals and platforms. Although, it enables direct communication and contact between the end-customer and manufacturer (Chung et al. 2012), which was also a benefit for the manufacturers. Furthermore, the manufacturers pursue mitigating the fear of bypassing intermediaries, by addressing the end-customer together with the intermediary, but they also reduce the horizontal level conflicts between different intermediaries by utilizing selective distribution.

The second research question “(2) How different factors impact selection of international distribution channel strategies of high-technology companies marketing innovative service products?” was answered in the ‘findings and discussion’ section by discussing different factors that impact channel strategies. The value within the channel relationships, product characteristics and maturity were claimed to have an impact on channels and they were examined as well as market diversity related factors. Especially business to business channels that are complex, have diverse channel settings and contain relationships with multilevel effects were stated to require further research (Sa Vinhas et al. 2010). This research studied the topic from manufacturers’ perspective and produced new knowledge relating the different theoretical areas – reflecting the business complexity, but also studying the manufacturers’ perceptions on the value within the chain. It is stated that companies’ perceptions about importance of transactions compared to importance of relationships in business should be examined (Rapp et al. 2008), there also is a request

for investigating importance of vertical integration compared to market transactions (Chung et al. 2012). This research has noticed these requests and states that the value in relationships can help to explain multiple channel choices and integration, but also the type of channel, intensity and coverage as well as standardization.

Vargo and Lusch (2008) suggest that there is a complex network of actors within the channel systems creating value. Sa Vinhas et al. (2010) further notices that the actors in these channel systems should understand the dynamics and roles that each actor play to create value. This study reinforces the assumption that relational value is highly important and that it can reveal contingencies between multichannel relationships. The relationship between the customer and intermediary produces value, but also increases manufacturer's reliance on the intermediary. Also Chung et al. (2012) state that intermediaries' investments with its end customers increase manufacturer's reliance on intermediaries as they "own" the customers. Thus, intermediaries might be necessary for the manufacturer to distribute products and to offer value adding services, as trying to build relationships with end-customers might be difficult (Chung et al. 2012). The manufacturer usually is willing to allow this dependency as intermediaries are a significant resource to enable closer relationships and offer after sales support for the end-customer. The relationship between the end-customer and intermediary can also be stated to reinforce the relationship, when the customer receives convenient and local service. As stated by previous research (Zhang et al. 2010), resources invested in building relationships will tie the channel members closer to each other and thus the manufacturers with close relationships consider more eagerly what kind of value is offered to intermediaries.

Product related factors explain the time frame in which these decisions are made (Gabrielsson et al. 2002). This research contributes to the product life cycle model theory by applying it to the remote condition monitoring service products and suggesting further implications by developing the framework. In introduction stage, the service product needs heavy support to be installed and configured, thus the manufacturer is the only party that can conduct the initial sales and implementation (Lele 1986). However, if there are skilled and capable intermediaries, they can be utilized also at this stage. When the product-technology develops in maturity and the customers become more interested, the manufacturers have a pressure to grow volumes and support capabilities through intermediaries (Krishnamoorthi 2012). At growth stage they are pursuing to serve growing demand by utilizing multiple channels, increasing intensity within existing channels and introducing the service product to new types of channels. Furthermore, at this stage channel integration increases and the companies pursue utilizing their existing

channels and relationships to expand without conflict. The manufacturers are further developing the service product to be less complex by integrating it to the new core products. When the product reaches more mature stage and is less complex (or integrated), according to the research, chance of utilizing Internet in sales increases.

Market diversity also affects distribution and it seems to have an effect on these global companies' distribution strategies by decreasing the feasibility of standardization (Dimitrova & Rosenbloom 2010). As product-market diversity increases due to further expansion and amount of markets, it increases pressure for adaptations (de Mooij 2014: 272 – 273). The case companies are still on quite restricted areas or have low intensity in the service product distribution, but increasing adaptation of strategy can be identified as their pursue expansion. It seems that language options and local service that must be available are the most important factors that affect distribution. When the customer expects more complex service configuration: having an electronic service, service agreements, and additional onsite or remote services, local presence is needed, which can lead to adaptation or modifying of distribution strategies. It is argued that some level of adaptation is needed in most companies as local knowledge is needed to make marketing decisions (Walters 1986). This claim can still be stated to be valid according to the findings of this research. Product-market combinations must be created when entering a market: penetration rates, wealth, cultures, instructions, training and other aspects are needed to consider (de Mooij 2014: 272 – 273). Even though different markets can vary, according to Shoham (2002) homogenous submarkets can be identified through segmentation which also enables positioning according to the segments. It seems that the companies are pursuing segmentation to be better able to market the service product without much adaptations. For a global company, this enables higher control and cost efficiency (Vrontis 2003).

### 6.3 Managerial implications

Also managerial implications can be drawn from the research to support decision making related to distribution channel strategies, when launching and developing new remote condition monitoring service products. The main implications for this study is that manufacturer's should consider various channel decision related aspects by investigating and evaluating the value in their current relationships, service product related factors and market environment development and structure. The companies should assess what kind of value each channel member produces, gains, is looking for receiving and how can all

of them participate in value creation. Channel partners can produce partnership advantages, especially in a long-term relationship with mutual trust and goals. Furthermore, these new means of serving customers should not be taken as a route to bypass intermediaries, but to create value together as intermediaries continue to have very important complementary roles within the channel.

It was evident that the cases favor a sales channel strategy with increasing vertical integration level when pursuing intensity and larger coverage globally. Hybrid structure can reduce conflicts, and especially selectivity in distribution will help to decrease the chance of conflict, but at the same time enable healthy amount of competition. Whereas, when having few partnerships in distribution and competitive setting that increases expansion pressure, dual channel may be effective. Within the cases, hybrid structure was utilized, when the partnerships allowed it and the product-technology was more mature, so that the customer can receive support from a suitable and skilled source. Hybrid distribution should be pursued to gain higher partnership advantages. In hybrid distribution the manufacturer would mainly offer support in sales and installation, and furthermore, offer more advanced services, when needed. However, it seems that manufacturers struggle in handing out services, even though it enhances customer service experience and locality. Thus it is suggested that companies decide level of control and thus level of service performed by the company.

All of the cases highlighted the importance of utilizing existing channels and pursued expansion through them as a first option, this highlights the importance previous experience, trust in relationships and stickiness between the partner companies (Zott et al. 2000). Building new channels is very expensive, so the manufacturer can utilize existing channels and create value by offering new item for the intermediaries and making the whole product portfolio more attractive for them to sell (Sa Vinhas et al. 2010). In addition, the customer base can start purchasing the service product from the channel they know, which adds value through convenience and improved offering in that channel. The study shows that the channel decisions must create value for the channel participants. This must be considered when managers are making distribution decisions as multiple channel decisions, channel types, intensity and coverage as well as standardization considerations. To add value the choices must be complementary and effective (Sa Vinhas et al. 2010). The customer needs must be fulfilled through the channel choices, the intermediaries must be skilled and capable to distribute the service product, but also gain benefits for their efforts. The manufacturer must also benefit from the distribution channel

setting for it to create value for all of the channel members, which includes control versus cost decisions.

The product-technology life cycle can explain why channels evolve from one to another. When the product-technology matures, there is more demand from the customers and thus expansion is more interesting and even necessary for manufacturers (Lele 1986). The manufacturing companies should start distributing their service products through direct channels to offer necessary support for the customers. Although, both indirect and direct channels can be started to be used at the same time, if there are suitable intermediaries with high skill level and special demand from the customers. Also, marketing experience on other products and services with existing channels can be used to directly utilize multiple channels. Low volumes, complexity and newness of the service product decreased ability to sell it through distributors in the beginning as also suggested by McNaughton (2002). Furthermore, internal sales force seems to face issues in selling new kind of offering as they do not see the value or do not have the skills and confidence to sell such a service product.

Suitability for Internet sales depends on the nature of the product, which must support Internet sales. Internet of Things enabled service product is considered a system product (mixture of product elements) and it needs to be installed and configured. It is stated to be difficult to sell through the Internet as more value has to be promoted in the sales situation, but also because security related aspects must be addressed. To grow the volume companies need to extend distribution to multiple channels. Service product can be standardized to require only minor customization from manufacturer, customer or value-added reseller (McNaughton 2002). Thus, it would be recommended to package the service as the companies are pursuing to do when integrating the service component into the core product. McNaughton (2002) thus states that support for these services can be limited to upgrades and telephone help lines, and thus it is more easily distributed on more diverse markets than traditional services.

However, the companies should consider what kind of service configuration generates the most value. Electronic services offer access to service at all times with the convenience of location to see valuable information. Thus it can be seen that the customer is a co-creator of value (Gummerus 2010). Also, the effort is small when they can receive alerts and service suggestions from the service provider. In addition, the configuration combining electronic and human interaction can enhance the value. There are certain benefits in new self-service channels, but also in the conventional, personal channels. It

is stated that personal service channels increase trust, allow customization and close relationship between the customer and the service provider (Barnes 1997). Thus, the manufacturers should consider the amount of electronic services and human interaction they want to have, but also what kind of service configuration the customers appreciate.

Liu et al. (2009) states that electronic service process related factors, such as, usability, privacy, security and appearance should be considered. The manufacturer should ensure that these are in place to make the use of electronic service convenient and but also mitigate the fear of using Internet connection for service, which seems to be a barrier for fast expansion. According to Gummerus (2010) security is still a great concern for the customers, but this was also confirmed during the study. The study shows that security related fears can be overcome by demonstration and personal interaction, which is considered important for explaining wireless solutions and data sharing. It is stated that, competence of sales people used for sales is important as well as transparency and means of demonstrating service product functions and manufacturer's policies (Gummerus 2010). Internal and external sales force may have issues in selling this kind of offering as they do not see the value or do not have the skills to sell such a service product, which implies that training first the internal sales force may be needed and thus direct sales or selling through skilled intermediaries is recommended.

It seems that differing segments, competition and need for locality in service are the most important factors that affect distribution standardization decisions. Increased need is when the customer not only expects having an electronic service, but also when the manufacturers are pursuing to sell service agreements, or some additional onsite or remote services. It is argued that some level of adaptation is needed in most companies as local knowledge is needed to make marketing decisions (Walters 1986). Even though different markets can vary, homogenous submarkets can be identified through segmentation which also enables positioning according to the segments. The manufacturers, thus, should invest time in segmentation. Depending on differences between the catered segments, the companies may find useful to serve the different segments through different channels. Thus, they can pursue standardization within this segment. Thus enabling value creation through effectiveness and fulfilling the needs of different customer groups.

The research can be claimed to propose that, hybrid strategy is the most favored expansion strategy and even an optimal solution. However, competitiveness and other relationship related factors might create a barrier for hybrid channels. It can be stated that the companies should study the value that is possible to be created through their channel



relationships, product related aspects and market environment to make a decision on international multichannel distribution. Thus, it can be stated that this study should be of interest to managers who intend to market condition monitoring solutions in manufacturing industries. Also, managers in other industries can find the results interesting and applicable to their particular setting. Although, the study focused on condition monitoring service products, the results may be applied also to other system products, combining different product and service elements.

#### 6.4 Limitations and future research

The theoretical findings of this study should be carefully considered as the research is a multiple case study having the limitations of a qualitative research and thus generalization may be limited to the particular context. It is stated that scientific facts should be based on multiple set of experiments, or cases, rather than single cases. The study pursued to produce more generalizable results by choosing multiple case strategy and to replicate the findings in different conditions (Yin 2009: 15). However, it is assumed that case studies are less objective, precise and rigorous than quantitative testing of hypotheses (Eisenhardt & Gaebner 2007). Thus channel strategies and development should be studied further in a quantitative research. This thesis research sought to explain contingencies between different factors and channel decisions, by exploiting different theories, namely value in relationships, product-technology maturity and market diversity.

As it is stated that qualitative research is context related, therefore, conclusions for the channel strategies might not be feasible to other industries, business to consumer markets or other service products than studied here. Multiple case study was chosen for its ability to produce generalizable results, however, the sample of four cases is quite small and incorporating more cases from different industries can be fruitful for producing more generalizable results. Also, it has to be remembered that these companies marketing remote condition monitoring services were headquartered and mainly concentrated on European and North American locations, so implications on other geographic areas is limited, even though, the studied cases were all conducting international business all over the world. The researcher acknowledges these limitations in cultural and geographical context, and thus, future research should be conducted in more versatile contexts, culturally and geographically. The results can, thus, be utilized by academics to further study multiple channels, Internet as a channel for B2B solutions and remote condition monitoring services. It is suggested to test the findings of this study in the future. Also,

the study focused on condition monitoring service products, but the results can be tested also with other similar products, combining different product and service elements.

As the study concentrated on manufacturing high-technology business to business companies, it is suggested to focus the research also on business to consumer companies and different industries. As stated before, industry-related factors may have a strong impact on the results. There has been research that has suggested that companies that have high market shares may be better equipped to leverage their existing relationships and brands better than the competition (Fang, Palmatier & Steenkamp 2008). Studying different industries, but also companies with high and low market shares can produce some interesting results in the future. This can help to understand patterns and differences between the industries.

The key methodological issue with this research is the dependency of interviews as a key information source. As the channels are evolving, the company key informants were the main source of evidence through data gathered in interviews, also in two cases only one key informant could be identified. This approach was complemented with Internet sources, for example, companies' Internet pages and articles. However, the sources could not be published to protect anonymity of the interviewees. Emphasis on interview data have to be considered when evaluating validity of the research. It is thus stated that more key informants and a diverse use of multiple sources of evidence would have provided robustness for the research. Thus, more research is needed to further validate the results of this research.

Although, all of the companies admitted to offer this service for better performance in serving the customers and increasing revenues, the study did not consider profitability and effectiveness of these strategies. So, the fit between the strategic decisions and performance should be studied. Also, these remote condition monitoring services were in their early life cycle stages. So, it would be interesting to study the fit between strategies and performance in a few years' time to see how the distribution channels have developed and how strategies affected the financial performance of the companies. Furthermore, the research had a key theme around value in relationships, where manufacturer, intermediary and customer are co-creating value within the distribution channel (Chung et al. 2012). Thus, it would be important to study the related effects and perceptions from the intermediary and customer perspectives. Knowledge about intermediaries' value perceptions would help the manufacturers generate even more value for the customers and enhance efficiency as well as relationships within the channels.

Also, as some of the case companies state, the pursuit was also to enhance customer experience through improved service and delivery. The study focused only on manufacturers' viewpoint on channel decisions, so customer perspective should also be incorporated to examine whether the channel decisions really fit the customers' buying processes and needs. Furthermore, the service product characteristics may have an effect, as it is designed as a value adding feature for core products and thus it is reasonable to sell together with the core product and utilize the existing channels. Selling the electronic service in the future, without the physical component would be interesting to study further.

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## APPENDICES

### Appendix 1.

#### COVER LETTER FOR REQUESTING AN INTERVIEW

[Company]

[Blank]

Dear [Interviewee Name],

My name is Maija Vanhala, and I am currently writing my thesis for University of Vaasa. I am writing to invite you to participate in my thesis research project to gain in-depth understanding about distribution channels (also called marketing channels). The thesis aims to study Internet of Things enabled innovative services, especially remote condition monitoring. The research seeks to explore channel systems and factors affecting distribution decisions to produce best practices and knowledge on contingencies between the different factors and channel decisions. The intensity and coverage, types of channels and dual distribution decisions will be studied.

This study is conducted in cooperation with [Company] as my sponsor and University of Vaasa providing theoretical and methodological support. I would like to interview companies playing a prominent role in founding and shaping the development of Internet of Things based services during the past years. [Company] will be one of the studied organizations. There will be another two to three case companies participating in this research.

The interviews are one-time face-to-face interviews between the interviewer (me) and interviewee. There should be 2 hours reserved for each interview. The interviews are planned to be conducted from June to August. The interviews will be recorded and transcribed and the interviewees will be provided with possibility to review and correct the transcriptions before analysis. The transcriptions will be made available online, individually for each participant (not shared with other interviewees).

All interviewees will finally gain access to research results and are able to utilize them in their business if so wanted. I expect these findings to include valuable managerial implications related to distribution decisions.

I sincerely hope that you will consider participating in my effort of studying distribution channels for Internet of Things enabled services to enhance learning and best practice sharing between different industries. This study is also extremely important for me in pursuit of graduation and professional development and thus I hope you can find time to participate!

You can expect me to contact you via telephone or email in a weeks' time to confirm your interest and discuss possible questions that have risen.

Please feel free to contact me any time via below details.

Sincerely,  
Maija Vanhala,  
Graduate student, University of Vaasa  
[Contact details]

## **Appendix 2.**

### INTERVIEW GUIDE FOR THE INTERVIEWEE

#### **Background questions for the interviewee**

- Age
- Role/position in the company
- Time in current position
- Size of the company

#### **Background questions regarding the service product:**

- The service product
- Involvement in decision making regarding channels
- Decision making process
- Service product availability on different markets
- Price range for the product

#### **Topics to be covered during the interview**

The topics are not limited to these topics and the interviewee may suggest further topics. Emerging themes during the discussion are directing the topics handled.

- **Channel system decisions**
  - dual distribution decisions
  - activity division within the channels
  - types of distribution
  - intensity/coverage decisions
  - market or segment related standardization / adaptation decisions
- **Factors affecting service product distribution decisions**
- **Value creation within distribution channels**

### Appendix 3.

#### GLOSSARY OF THE TERMS USED DURING THE INTERVIEW

*International distribution channels:* International distribution channels, also referred to as marketing channels, indicate how a product or a service is made available internationally from the producer to the end customer, through possible intermediaries (middlemen, eg. distributors, OEMs, retailers) (Palmatier et al. 2015: 156). Mooradian et al. (2012: 311) state that different parts of the channel handle different value adding functions, for example, logistics, transactions or various facilitating tasks, such as promotion, servicing and supporting installed base. The companies must decide the intensity and coverage of their distribution (exclusive/intensive distribution, geographical areas) and type of the channels (eg, company sales force, online sales, retail stores and wholesalers). They also have to make dual distribution decisions: whether to have direct, company owned channels, indirect, external entity owned or multiple channel distribution consisting of either both channels in non-cooperative manner or integrated channels (Palmatier et al. 2015: 156).

*Channel integration:* As Mooradian, Matzler and Ring (2012: 311) have stated, different parts of the channel handle different value adding functions, for example, logistics, transactions or various facilitating tasks, such as promotion, servicing and supporting installed base. In the case of channel integration these channel functions have been divided between the manufacturer and the intermediary or different parts of channel owned by manufacturer (Anderson et al. 1997), integrating different activities to enhance customer experience, make it more consistent and enabling them to swap channels. For example, a sales lead is generated by the intermediary and the purchase made through manufacturer, or sales might be done on manufacturer's website, but product delivered by the intermediary (Tsay and Agrawal 2004), usually this requires at least some amount of data integration and tight collaboration.

*Services versus products:* There are four characteristics related to traditional services: intangibility, heterogeneity, inseparability and perishability (Lindberg-Repo and Dube 2014: 123), which means that the service is produced in interaction with the customer and

it cannot be stored. Nevertheless, many international services are separable and thus exportable (Erramilli and Rao 1993) and also storable, which mean that consumption can take place in different place than production, for example, software on computer's hard drive. They often also include some amount of tangibility, for example, disk for software distribution (Javalgi and White 2002). Division between physical and virtual comes to the products requiring traditional distribution system and products that do not require physical distribution (Dann and Dann 2011: 162-163). Often, products are used to produce services, e.g. air travel and services are needed to maintain products, such as, car repairs (Rahman 2004). Similarly, it is hard to categorize what is service and what is a product. Rahman (2004) suggests that when the source for the fundamental benefit is the tangible element, the product is considered a good and when the source is more intangible, it is a service. In this study we using wording *service product* to further highlight the qualities of the studied services.

*Electronic business and e-commerce:* E-commerce is used to refer to outward facing activities which are fairly easy to implement. E-business includes e-commerce, but also internal processes, such as production and product development (Computerworld 2000). Electronic services (remote condition monitoring) that are studied in this research belong to e-business. Currently majority of companies are pursuing a mixed “bricks and clicks strategies”, seeing online as an extension to their traditional marketing (Laudon and Traver 2010: 6-50). It is said that e-business is possibly the biggest disruption to channel structures and strategies and in the future, and that they will be critical for financial and strategic performance of most channel participants (Palmatier et al. 2015: 315-316). Transactional facilities on the Internet enable selling electronic services online and these services are increasingly popular. Their impact on distribution are studied in this research.

*Internet of Things:* The concept Internet of Things describes the devices connected to the Internet, these include sensors, mobile phones, computers, cars and motors, household appliances, for example, and they can now also be connected to each other. Number of devices being connected is increasing almost exponentially. The devices produce data and processing as well as utilizing it, is made available in everyday situations, such as, processes in factories, logistics applications and private households. New, scalable

solutions that are compatible and secure in the environment are needed. Internet of things based solutions and services are developed to support business, process data and manage complex network of interconnected devices. (Internet of Things 2015.)

*Value and value creation:* According to Grönroos and Helle (2010) value has technical, monetary and perceptual dimension. Technical dimension consisting process functioning and efficiency related aspects. Monetary dimensions comprises of cost savings and business growth, and perceptual dimension relates to performance perception, trust, commitment, attraction and commitment (Grönroos and Helle 2010). Value creation means performing actions that increase the worth of goods, services or a business and value created can be measured or perceived using the dimension mentioned above (Business dictionary 2015).

## Appendix 4.

### INTERVIEW GUIDE FOR INTERVIEWER

#### Background questions for the interviewee

Age:

Role/position in the company:

Time in current position:

Size of the company:

#### Background questions regarding the service product:

Please describe briefly the service product:

- How does the content add value to the customer?
- How do you think customers benefit e-services? How, why?

Please describe your involvement in decision making regarding channels:

- Please describe briefly the decision making process:

Price range for the product:

For which platforms is the service product designed for, why?

#### Distribution channel combinations for the service product

- Can you please describe your channels of distribution for this service product?
  - What kind of channel structure do you have? Why?
  - What are the types of distribution channels you have? Why?
  - What kind of intensity or coverage decisions have you made? Why?
  - What about the product channels?

#### Designing channels

- What do you consider important when designing distribution channels for this kind of new service product? (two components)
  - What were the biggest concerns when designing distribution? Why?
  - What kind of support is needed to install / commission / use the product?
  - How do you think this affects?
  - Did you face or are you facing any challenges regarding service distribution? How did you solve the issues?

### **Manufacturer related factors that affect channel decisions**

- What kind of internal factors have influenced distribution decisions?
  - Internal infrastructure
  - Organizational capabilities
  - Other resources
  - Internet sales related thoughts

### **Which intermediary related factors affect distribution decisions?**

- Do you have partners for service?
- What kind of activities do they perform? Why (not)?
- How do you consider the existing product or service channels when designing distribution?
- Do all the partners see benefits in these services for their business? Why?
- What kind of motivations and benefits do you / would see for using multiple channels?

### **What are the biggest factors of different end-customer groups that exist and that affect channel decisions? Why?**

- What are their expectations and needs regarding distribution channels? Why?
- What kind of expectations do they have regarding offering? Why do you think so? How does it affect distribution?
- How do you think these channel decisions brings value to the customers?
- How do your customers feel about e-services?
- How do you see the role of direct interaction?

### **Market environment**

- Can you tell me about the market environment?
  - Service product availability on different markets:
    - Where did you choose to go first? Why?
    - Is it available on all target markets? Why (not)?
  - Are there any differences in distribution between markets? Why? Why not?
  - Do you think the market is ready for the service product?
  - Are you facing some competition? How does that affect?



**Appendix 5.**

## INTERVIEW PARTICIPANT DATA

Case A	<p><b>Interviewee 1:</b>  Position: Global product manager  Time in this position: Since beginning of 2015 (three years in the company)  Length of the interview: 1 hour 27 minutes  Date of the interview: 29.07.2015  Additional information received: 08.09.2015 (e-mail)</p>
Case B	<p><b>Interviewee 2:</b>  Age: 43  Position: Global product manager  Time in this position: 1,5 years  Length of the interview: 1 hour 20 minutes  Date of the interview: 17.08.2015</p> <p><b>Interviewee 3:</b>  Age: 45  Position: Marketing and sales manager for service  Time in this position: Two years (since 2001 in the company)  Length of the interview: 1 hour 26 minutes  Date of the interview: 28.08.2015</p>
Case C	<p><b>Interviewee 4:</b>  Age: 36  Position: General manager  Time in this position: Since beginning of 2015 (more than 5 years in this business)  Length of the interview: 1 hour 29 minutes  Date of the interview: 08.07.2015</p> <p><b>Interviewee 5:</b>  Age: 34  Position: Product specialist for condition monitoring  Time in this position: One year (about 10 years in the company)  Length of the interview: 1 hour 38 minutes  Date of the interview: 09.07.2015</p>

Case D	<b>Interviewee 6:</b> Age: 39 Position: Director of strategy and data driven services Time in this position: Since beginning of 2015 (since 2012 in the company) Length of the interview: 1 hour 1 minute (1 <sup>st</sup> ) & 42 minutes (2 <sup>nd</sup> ) Date of the interview: 27.08.2015 (1 <sup>st</sup> ) & 31.08.2015 (2 <sup>nd</sup> )
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## Appendix 6.

### DISTRIBUTION INFLUENCING FACTORS BY CASE

Case	Service product	Intermediary	Manufacturer	Customer	Market
<b>Case A</b>	<p>An enabling tool for mid- or long-term agreement with the customer</p> <p>Supporting tool for technical, maintenance</p> <p>Benefit in getting access to the production or product data to understand how our products work and how tracked they are, location will help generate services / products</p> <p>Failure prediction for condition based maintenance</p> <p>Easy to see how the system is going on, fleet of products in your service agreement</p>	<p>Partners needed if service business is going to grow</p> <p>In future we can't manage with the same service organization and we cannot grow the same way in head count</p> <p>Lack of interest or skills for selling service</p>	<p>You never know where the partners are shipping the products at the end</p> <p>We would really like to have a close relationship with our customer, for one year or two year</p> <p>Not are all products are serviced by manufacturer this is part of our service strategy to penetrate our installed base</p> <p>Important that service guys are close to the customer and in the best case they know each other</p> <p>Must consider if partners needed and wanted for  service business</p>	<p>Most customers select the agreement that we care for the products when they're running the production</p> <p>Data sharing we always have to discuss with the customers</p> <p>It's a long-term relationship to rely on each other and to trust each other</p> <p>Have to have high value so that the customer is opening this data sharing</p> <p>Service is at the end people or relationship business, because service is little bit always about trusting</p>	<p>Important to service in these different languages, because it is a platform for maintenance guys</p> <p>Big hype now with internet of things and these, there are a lot of discussion and I think it will help us there to convince the customer.</p> <p>Monitoring of our product, there is no competition, because others don't have access to the data; but competition in other access and connectivity solutions</p>

Case	Service product	Intermediary	Manufacturer	Customer	Market
Case B	<p>Cyber security</p> <p>Simple and straightforward and not so complex, works with any product</p> <p>Demand for the features</p> <p>Online information, predicting possible difficulties: Cheap investment to detect a probability of failure</p> <p>Subscription: if no local relationships with the end-customer, selling service for non-manufacturer product is difficult</p>	<p>Third parties are competitors in product business, but don't have their own solution</p> <p>The OEM factories buy the sensors only if customers specify that</p> <p>OEMs: online monitoring system with good quality and service, easy to handle and install, keep the installation price and the purchasing price down, also fulfill the specification of that customer</p> <p>Intermediary / customer: Important that they trust the factory and the factory can deliver a product from us</p>	<p>Market is quite mature, but brand name helps, we have a reputation of having good quality</p> <p>Sales force feel it is complicated and difficult to sell</p> <p>Avoid going through different internal channels or divisions</p> <p>Trust is important with customer and makes business easier; easier selling to already good customers</p> <p>Very difficult to sell subscription when sensors sold through third parties</p>	<p>Demands, being closer to the customer, trying to identify their needs</p> <p>A lot of stakeholders to be considered</p> <p>Demonstration in personal sales usually done by a specialist</p> <p>Recommendation can lead to more service sales</p> <p>Lock-in effect through interaction, personal contact allows selling more and packages</p> <p>Have to convince the end-customer (their specifications) Close relationships help informal sales</p>	<p>The competitors have been in the market for 15-20 years</p> <p>Comparing to competitor</p> <p>China difficult because of competition, local buying and low prices</p> <p>English as language (others main languages may be considered)</p>
Case C	<p>Security related issues</p> <p>Set up must be done by Case C</p> <p>Completely different from traditional case C products</p> <p>Main target of this product is to improve the relationship with the customer</p> <p>Relationship to sell more in the traditional business</p> <p>Save money, data from assets to better manage their assets</p> <p>Business for repairing, upgrading and the spare parts</p>	<p>Devices are quite small, inexpensive and they perfectly fit the distributor</p> <p>Intermediaries have very close relationship with their customers</p> <p>Not capable of creating setup for online service</p> <p>Can reach smaller companies not possible to reach by case C sales engineers</p> <p>Will get very good margin</p> <p>Not capable of doing field service</p>	<p>Resources</p> <p>Competence</p> <p>Sales force not familiar with this kind of product</p> <p>Known for pump or mechanical manufacturing not instrumentation</p> <p>Will need to be involved to support the customer</p> <p>Rapid expansion and aggressive pricing needed to gain awareness</p> <p>If intermediary doesn't carry sensors, case C tells that it will contact customer instead, any case will get allocation of booked order</p>	<p>Security and mindset</p> <p>Customers are losing their technical competence</p> <p>Customers don't recognize case C as an instrumentation supplier</p> <p>Success stories to promote value</p>	<p>Certification on different markets</p> <p>Mentality and culture</p> <p>At the moment service in English</p> <p>In the market many known instrument providers</p> <p>Market readiness still developing</p> <p>Cultural aspect needed to be considered (women as sales people...)</p>

Case	Service product	Intermediary	Manufacturer	Customer	Market
Case D	<p>Start kit with elementary data, communication and analysis, then can add service on top</p> <p>Service is reliant on shared data</p> <p>Selling equipment and services is completely different than selling only equipment</p> <p>Product more competitive and that enables intermediary to sell more with price increase</p> <p>Shorten the response time and shortening the mean time for repair</p> <p>Reports of their installed base in that territory and then triggers in service</p>	<p>Integrators will add services around productivity and process optimization</p> <p>Creating simple packages that can be sold through distributors</p> <p>Distributors have a lack of know-how and advanced competences</p> <p>Distributors provide improved service and delivery, important extension to our sales force, because they offer increased coverage for us</p> <p>Partner program to avoid channel conflicts</p> <p>Distributors are very important partners especially in service and maintenance</p> <p>Feedback from installed base, information how it is products are used</p>	<p>Increased sales price</p> <p>License fee from distributor using the platform</p> <p>Can sell more because of the extensive service network - willing to trade off some service side revenues to integrator or distributor</p> <p>Success factor that we have aligned interest in the sales force (combined product and service sales)</p> <p>We see our distributors as partners and we are looking to build long-term relationship with them</p> <p>To avoid 'by-passing' addressing the customer together with the distributor</p>	<p>Concern about sharing too much data</p> <p>Easy access to the data</p> <p>Process is key in welding: type of parameters have you set up to do that particular type of welding, reluctant to share</p> <p>Want quick run time on service requests</p> <p>What the customer is willing to pay versus what is the cost to serve</p> <p>Distributors need to add value to the customer, otherwise won't buy there</p> <p>Very deep access into the customer's operations, which then enables to tailor offering to their needs, even more precise to unlock even more value</p>	<p>Demand of data driven services</p> <p>Distribution structure varies across markets and that's based on market structure and logic basically and concentration of customer type</p>