



## ABSTRACT

**Author:** Salla Aalto

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Supervisors: Professor, D.Sc. (Tech.) Marko Torkkeli, D.Sc. (Tech.) Daria Podmetina

**Keywords:** customer portal, service-dominant logic, customer-centricity, customer experience, digital customer experience

**Hakusanat:** asiakasportaali, palvelulähtöinen logiikka, asiakaskeisyys, asiakaskokemus, digitaalinen asiakaskokemus

The objective of the thesis is to develop a sales module for the Valmet Customer Portal. The case company is pursuing a shift from a product-centric logic to a service and customer-centric logic in its business, and the enhancement of customer experiences through digitalization. The research focuses on how the customer portal would enhance customer-centricity and customer experiences, and the kind of features and characteristics in the portal that would benefit the customer during a B2B sales project.

The literature of the thesis focuses on a service-dominant logic, customer-centricity, and customer experience. The empirical research is conducted using qualitative methods: Customers and salespeople were interviewed to gather data from the module's future users. The key findings were that the sales module would enhance customer-centricity and customer experiences by creating more coherent customer experiences, intensifying interaction, building stronger relationships, and assisting in understanding customer needs through designated features and characteristics. The research found that customers would prefer module features such as material sharing, benchmark data, and calculating project's profitability. In addition, the research revealed several characteristics that must be considered in development and optimized for enhanced customer experiences. Some of the most important are ease of use, simplicity, personalization, and security. The implementation of the module will be executed according to the findings.

## TIIVISTELMÄ

**Tekijä:** Salla Aalto

**Työn nimi:** Myynnin moduulin kehittäminen digitaaliseen asiakasportaaliin asiakas-keskeisyyden ja asiakaskokemusten parantamiseksi

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**Hakusanat:** asiakasportaali, palvelulähtöinen ajattelu, asiakaskeskeisyys, asiakaskokemus, digitaalinen asiakaskokemus

**Keywords:** customer portal, service-dominant logic, customer-centricity, customer experience, digital customer experience

Työn tavoitteena on kehittää Valmet Asiakasportaaliin moduuli myynnin käyttöön. Case-yritys pyrkii siirtymään tuotekeskeisestä ajattelusta palvelu- ja asiakaskeskeiseen ajatteluun ja parantamaan asiakaskokemusta digitalisaation kautta. Työssä tutkitaan, kuinka asiakasportaali edistäisi asiakaskeskeisyyttä ja parantaisi asiakaskokemusta sekä millaiset toiminnot ja ominaispiirteet hyödyttäisivät asiakasta B2B myyntiprojektissa.

Työn kirjallisuus keskittyy palvelulähtöiseen ajatteluun, asiakaskeskeisyyteen ja asiakaskokemukseen. Työn empiirinen osuus on toteutettu kvalitatiivisen tutkimuksen avulla, ja tätä varten asiakkailta ja myyntihenkilöiltä kerättiin dataa haastattelujen avulla. Tutkimuksen tuloksien mukaan asiakasportaali edistäisi asiakaskeskeisyyttä ja parantaisi asiakaskokemusta luomalla yhtenäisempiä asiakaskokemuksia, tehostamalla vuorovaikutusta, rakentamalla vahvempia asiakassuhteita ja auttamalla ymmärtämään asiakkaiden tarpeita tiettyjen moduulin toimintojen ja ominaisuuksien avulla. Tutkimuksen perusteella asiakkaat haluavat moduuliin toimintoja, joista muutama tärkeimmistä on materiaalin jakaminen, vertailudata ja projektin kannattavuuden laskeminen. Lisäksi tutkimus toi ilmi useita digitaalisen palvelun ominaispiirteitä, jotka pitää ottaa huomioon kehitystyössä ja optimoida, jotta voidaan tarjota parempia asiakaskokemuksia. Tällaisia ominaispiirteitä ovat muun muassa helppous, yksinkertaisuus, personointi ja turvallisuus. Moduuli toteutetaan tutkimuksen tuloksien perusteella.

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In Jyväskylä, 2<sup>nd</sup> September 2019

Salla Aalto

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## **LIST OF ABBREVIATIONS**

A2A	Actor-to-actor
B2B	Business-to-business
B2C	Business-to-consumer
C2C	Consumer-to-consumer
CEM	Customer experience management
G-D logic	Goods-dominant logic
IT	Information technology
P&E	Pulp and Energy business line
PM	Board and Paper Mills business unit
R&D	Research and development
S-D logic	Service-dominant logic

# 1 INTRODUCTION

## 1.1 Background

This thesis is written for Valmet, a Finnish manufacturing company supplying and developing process technologies, services and automation for the pulp, paper, and energy industries. The topic was suggested by the Board and Paper Mills business unit's (PM) sales and marketing department in Jyväskylä. Valmet launched an online customer portal in the summer of 2018, and PM wished to examine how the existing customer portal could be utilized in a project's sales phase. The main aim was to enhance customer-centricity and customer experiences during the sales phase and to examine the kind of features and characteristics that would benefit the customer in a sales project.

Valmet's Board and Paper Mills business unit is part of the Valmet Paper business line, which supplies board and paper machinery, equipment, and machine rebuilds for the board and paper industry (Valmet 2019b). PM has an extensive installed base, and 40 percent of all paper and board produced globally is made by Valmet machinery (Fisher International 2019). Serving customers and customer excellence has become a strong part of Valmet's strategy, and Valmet currently focuses on providing the best possible customer service through committed teams close to the customer and integrated offerings that combine process technology, automation, and services. Valmet is developing its service approach, with the aim of improving the reliability and performance of customers' processes, customer experience, and the growth of service businesses. In addition, Valmet defines digitalization and new technologies as one of the key megatrends affecting its strategic choices. In 2018, digitalization's involvement in Valmet's R&D efforts was the most significant yet, and one of these efforts was the Valmet Customer Portal. Digital channels and services are being developed to offer better customer experience and service throughout the customer journey. (Valmet 2019a)

In general, the economic focus has shifted from the manufacturer's perspective toward the consumer in recent decades, and the interest in service has grown (Vargo and Lusch 2004; Vargo, Lusch and Koskela-Huotari 2019). The orientation toward service and intangibles rather than products and tangibles is explained by the service-dominant logic theory, which

has been evolving among scholars, and shifted gradually to practical thinking (Vargo, Lusch and Koskela-Huotari 2019).

In addition to a service-dominant logic, customer experience has arisen as a topical issue during the 21<sup>st</sup> century. According to a study by Accenture (2015: in cooperation with Forrester Consulting), improving the customer experience was the most rated business priority companies had for the following year. The study also found that digital aspects have become increasingly important in managing customer experience, and 63 percent of companies participating in the research were planning to enhance their digital experience. Nevertheless, for most companies, a digital customer experience is not yet a differentiator. Only 5 percent said their company was exceeding their customers' expectations in digital experiences. The Marketing Science Institute (2016) listed customer experience as one of the most important research challenges in the next two years. Yet there is limited research focusing on business-to-business (B2B) customer experiences, and customer experience has been researched significantly more in the business-to-consumer (B2C) context (Zolkiewski et al. 2017).

Compared with B2C companies, B2B firms have not fully leveraged digital solutions to enhance customer experience through tailoring and facilitating the customer journey (Dubois and Clementino 2017). This could create a competitive advantage for B2B companies through differentiation from their competitors, e.g. with a customer portal. Consultancy firms offer various digital customer portals for B2B companies to keep everything the customers need in one place. According to various firms offering customer portal consultancy (CRMJetty 2019; Intershop 2019; Belski 2018; Insite 2018), a good customer portal is easy to reach, customized, and shows customers only relevant information of offered products and services. The information is up-to-date and available at all times by automatically synchronizing the latest updates and document versions for portal users (Huddle 2019; Intershop 2019; Belski 2018; Insite 2018). Customer portals can offer communication between the company and its customers through various channels, such as chat, online form, and video calls (Intershop 2019). User access can be role-based, giving

user roles different views and functions of the portal (CRMJetty 2019). In addition, digital customer portals are generally more transparent and secure than email (Huddle 2019).

## **1.2 Objectives and scope**

The main objective of the thesis project is to develop a sales module for a recently implemented online customer portal to enhance customer-centricity and customer experiences. Using the sales module, documentation and communication with the customers aim to clarify and function more efficiently, and all the services can be found in one platform. Furthermore, improved information security is pursued because of the distribution of confidential information.

The main research questions are as follows:

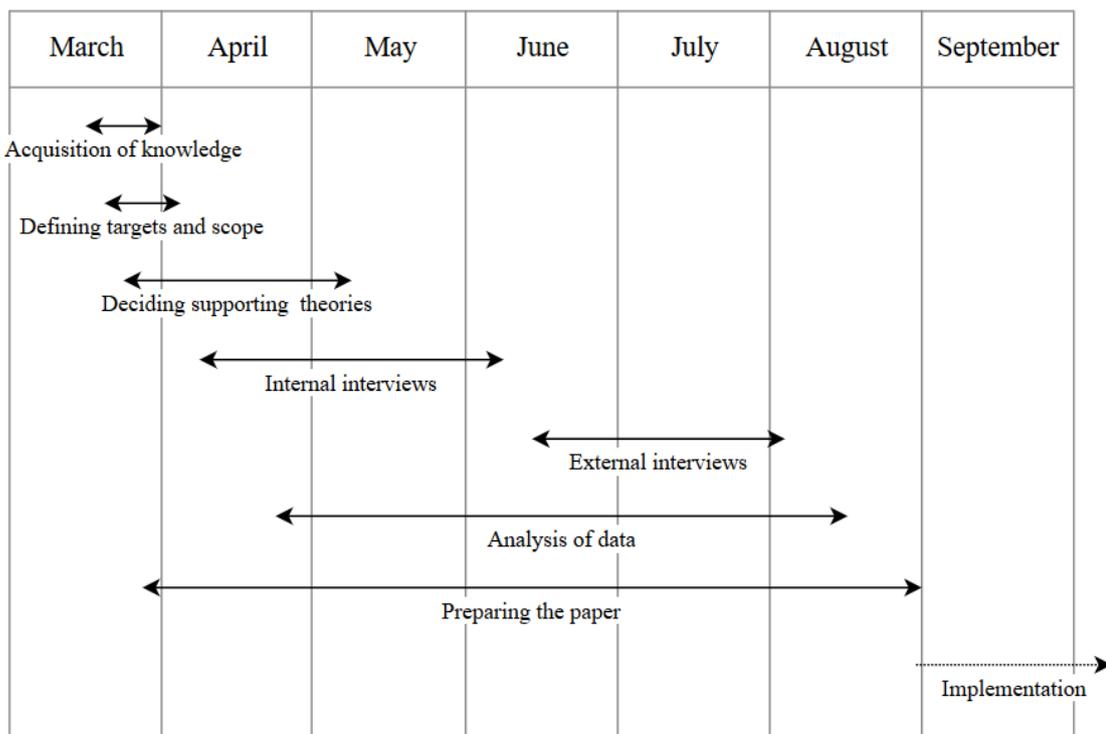
1. How would a customer portal enhance customer-centricity and establish successful customer experiences during a sales project?
2. What kind of features and characteristics in the customer portal would benefit the customer during a sales project?

These research questions are designed to encompass the objectives and clarify the problems for which the thesis is seeking answers. The first research question is broader and covers the objective of enhancing customer-centricity in sales projects, and creating coherent and improved customer experiences. The second seeks solutions for developing features and adding characteristics that would benefit the customer during a sales project.

The research is limited to the development of the sales module, and the focus is exclusively on capital sales projects, excluding presales and aftersales. Capital sales include the sales and marketing of board and paper machines, and the sales perspective in pulp and energy. The research covers an analysis of the module, but implementation has been excluded from the scope. Thus, feedback from customers and internal users cannot be included in the thesis.

### 1.3 Execution of research

The research project started in mid-March 2019 and lasted until August 2019. The project's first step was to acquire knowledge about the already existing customer portal and get to know the personnel working around it. In addition, the targets and scope were defined, and suitable theories were decided. Next, internal interviews were conducted to gain an understanding of the present state of communication in sales projects, how personnel communicate with customers, and opinions of how the present system works. In addition, opinions about the current portal and ideas about the future sales module were acquired. The internal interviews were executed at Valmet's sales offices during April, May, and June 2019. After the internal interviews, external interviews were initiated with Valmet's customers. Customer interviews were conducted in June, July, and August 2019. Internal and external interviews were analyzed, and the development of the actual sales module started based on the analyses. The writing process started at the beginning of the project, and the paper was written as the project proceeded. The research process is visualized in Figure 1.



**Figure 1.** Research process

During the project's execution, its plan for interviews changed. The project first started with the scope of PM capital sales, and 21 salespeople were interviewed. In late May, the target group was broadened to cover the Valmet Pulp and Energy Business Line (P&E), and seven employees participated. A total of 28 people were interviewed from both business lines. Later, six PM customers were interviewed to gain the perspective of the targeted users.

#### **1.4 Structure of thesis**

The thesis is divided into six chapters. It starts with an introduction, where its background, objectives, and scope are presented to introduce the reader to the topic and elaborate the reasons behind the research project. Following the introduction, the thesis continues with the theoretical part. Chapter 2 presents the service-dominant logic and the basis of the philosophy in B2B. Chapter 3 discusses customer experience and its digitalization, introduces the digital customer experience, and seeks options in the literature to improve customer experience. The empirical study begins in Chapter 4. First, the research design and the basis of the development process are presented, following two subchapters for internal and external empirical research executed via interviews. The data collection is presented for both interviews, and analyses of the gathered data are executed. In Chapter 5, the results of the research are introduced and further discussed. The final chapter concludes the thesis. The structure and content of the thesis is summarized in Table 1.

**Table 1.** Structure of thesis

<b>Chapter number</b>	<b>Name</b>	<b>Content</b>
1	Introduction	Background, objectives with research questions, scope with limitations, and execution and structure of thesis.
2	Service-dominant logic	Definitions of service-dominant logic, value co-creation in B2B relationships, and an overview of customer-centricity in sales and marketing derived from the philosophy.
3	Customer experience and its digitalization	Definition of customer experience, digital customer experience, and how to create a successful digital experience.
4	Methodology	Research design and basis of the development process. Internal and external interviews and their analyses.
5	Findings and discussion	Presentation of results, verification of reliability and validity, discussion of recommendations, and future implications.
6	Conclusions	Conclusions of the research and its results.

## 2 SERVICE-DOMINANT LOGIC

Since the Industrial Revolution, economics has focused on the tangible outputs and efficiency of production. Its focus later shifted from the producer's perspective to the consumer's, and the current orientation is on intangibles rather than tangibles (Vargo and Lusch 2004). Interest in service has grown hugely during recent decades, and companies have been re-orienting toward services rather than manufacturing (Vargo, Lusch and Koskela-Huotari 2019). Researchers have demonstrated that customers do not need goods in general, but they need services to satisfy their needs (Vargo and Lusch 2004). The service-dominant (S-D) logic was created to explain this new way of thinking.

The service-dominant logic was first presented by Vargo and Lusch (2004), and has received wide interest since first publication (Vargo, Lusch and Koskela-Huotari 2019). The logic represents a philosophy that focuses on intangible resources, co-creation of value, and relationships (Vargo and Lusch 2004). Contrary to conventional approaches that focused on goods, S-D logic considers service as the basis of economic exchange (Vargo, Lusch and Koskela-Huotari 2019). Vargo and Lusch (2004) define service as the application of specialized competences by one entity for the benefit of another, and goods are delineated as service-delivery mechanisms. The distinction between the traditional product-oriented view and the service-dominant logic represents a shift from a focus on company output with a kind of embedded utility to a focus on the process whereby actors use their resources reciprocally with other actors for mutual value creation (Vargo, Lusch and Koskela-Huotari 2019). S-D logic can be applied to all kinds of marketing offering (Vargo and Lusch 2004).

In a study by Vargo, Maglio and Akaka (2008), the conventional view of economics is referred to as goods-dominant (G-D) logic. G-D and S-D logic differ in their conception of value and value creation. G-D logic is based on "value-in-exchange", where value is created by the (manufacturing) company and distributed in the market through exchange, usually of money or goods. S-D logic is based on "value-in-use", meaning value is co-created in interactions with providers and beneficiaries. This occurs through the application of competences and integration of resources. The purpose of value in S-D logic is to increase

survivability, adaptability, and system wellbeing through service. In contrast, the purpose in traditional logic has been to increase wealth for the company. (Vargo, Maglio and Akaka 2008)

## **2.1 Foundational concepts and axioms of service-dominant logic**

Stephen Vargo and Robert Lusch were the first to present the theory of S-D logic, and after their first publication in 2004, they continued the development of the theory with other scholars, amplifying the definition, concepts, axioms, and premises of S-D logic (Vargo, Lusch and Koskela-Huotari 2019). This subchapter presents the foundational concepts and axioms of the logic.

S-D logic has five foundational concepts at its core: actors; value; service; resources; and institutions (Vargo, Lusch and Koskela-Huotari 2019). The first concept, actors, is used to refer to traditional labels such as producers, suppliers, and consumers more neutrally (Vargo and Lusch 2011). Vargo and Lusch state that it reflects the fact that all the entities fundamentally do the same thing: the co-creation of value through service provision and resource integration (Vargo and Lusch 2011). In addition, the actor-to-actor (A2A) focus includes studies of business-to-business (B2B), business-to-consumer (B2C), and consumer-to-consumer (C2C) under one label (Vargo, Lusch and Koskela-Huotari 2019). The second concept, value, is an actor-specific indication of benefit that is always co-created (Vargo and Lusch 2008; Lusch and Vargo 2014). In general, value creation is the reason for exchange, and service is what is exchanged in value co-creation (Vargo, Lusch and Koskela-Huotari 2019).

The third foundational concept, service, is the application of resources by one entity for the benefit of another (Vargo and Lusch 2004), and it can be supplied directly or indirectly through a good or money (Vargo, Lusch and Koskela-Huotari 2019). According to Vargo, Lusch and Koskela-Huotari (2019), the fourth concept, resources, is defined as the source of service provision, and they can be anything that an actor can use to create value. They can be classified in two groups: operand and operant resources. To create benefit, operand

resources require other resources to act on them, but operant resources are capable of acting on other resources to provide benefit. Operand resources are often tangible and static, e.g. natural resources, and operant intangible and dynamic, e.g. skills and knowledge (Vargo, Lusch and Koskela-Huotari 2019). The fifth foundational concept is institutions, which in this context does not refer to organizations. Institutions are actor-generated rules, meanings, symbols, norms and aides of collaboration, communication and decision making, and they make value co-creation possible (Vargo and Lusch 2016; Vargo, Lusch and Koskela-Huotari 2019). They usually exist as part of more comprehensive institutional arrangements used as coordination mechanisms for value co-creation activities, such as service exchange and resource integration (Vargo, Lusch and Koskela-Huotari 2019).

Vargo and Lusch (2004) presented eight foundational premises of S-D logic in their first publication of the emerging logic. The logic has continued to evolve, and the original authors (Vargo and Lusch 2008) and other scholars such as Grönroos and Voima (2013) have extended and updated the premises. They were further reduced to four axioms in 2014 (Lusch and Vargo 2014). In 2016, Vargo and Lusch (2016) presented their latest compilation of eleven foundational premises and five axioms for S-D logic. The following are the five axioms which require special attention:

1. Service is the fundamental basis of exchange.
2. Value is co-created by multiple actors, always including the beneficiary.
3. All social and economic actors are resource integrators.
4. Value is always uniquely and phenomenologically determined by the beneficiary.
5. Value co-creation is coordinated through actor-generated institutions and institutional arrangements. (Vargo and Lusch 2016, p.8)

The first axiom emphasizes that the application of knowledge and skills, i.e. service, is the basis for all kinds of exchange, and service is exchanged for service (Vargo and Lusch 2008). The second axiom refers to the process of value co-creation through the actions of several actors that contribute to each other's wellbeing (Vargo, Lusch and Koskela-Huotari 2019). Value co-creation is not optional, but often occurs without an awareness of other actors (Vargo, Lusch and Koskela-Huotari 2019). The third axiom signifies that the context of

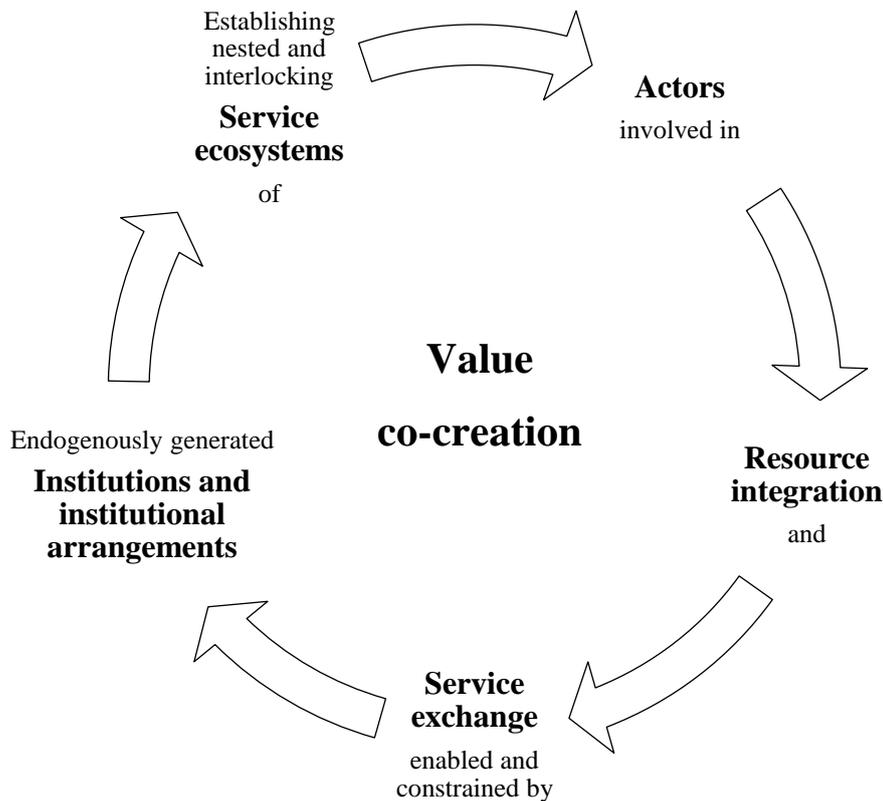
value creation is networks of networks (Vargo and Lusch 2008), and acts of service provision require the integrating and utilizing of different resources (Vargo, Lusch and Koskela-Huotari 2019). The fourth axiom means that the value, although co-created, is evaluated by a particular beneficiary, and the evaluation is unique for each beneficiary (Vargo, Lusch and Koskela-Huotari 2019). Value is experiential, contextual, and idiosyncratic (Vargo and Lusch 2008). The last axiom emphasizes the importance of institutions as they provide the ingredients for complex resource integration and service exchange activities (Vargo, Lusch and Koskela-Huotari 2019). Vargo, Lusch and Koskela-Huotari (2019) state that these five axioms are the core of S-D logic, and the other six foundational premises can be derived from them.

## **2.2 Value co-creation in B2B relationships**

S-D logic is based on the idea that the customer becomes a co-creator of value (Vargo, Maglio and Akaka 2008). According to Payne, Storbacka and Frow (2008), the process of value co-creation occurs when a customer consumes or uses a product or service. The process includes the supplier creating value propositions and the customer determining the value of the good or service that is consumed (Payne, Storbacka and Frow 2008). Vargo, Lusch and Koskela-Huotari (2019) define value co-creation as an integration of resources from various sources by multiple actors to realize benefits in the beneficiaries' use. The customer is always an actor in value co-creation (Vargo, Lusch and Koskela-Huotari 2019). Companies can pursue the maximizing of the lifetime value of desirable customer segments by the successful management of value co-creation and exchange (Payne and Frow 2005). Co-creation of value can support companies in emphasizing the customer's perspective and improving the process of identifying customer needs, thus making it a desired goal (Lusch and Vargo 2006).

Vargo and Lusch (2016) describe the process of value co-creation in their later study. They state that actors in value creation are involved in resource integration and service exchange – both processes of value co-creation. The processes are enabled and constrained by institutions and institutional arrangements (assemblages of interdependent institutions). The

actors co-create value through holistic and significant experiences in nested and overlapping service ecosystems that are governed and evaluated through their institutional arrangements. (Vargo and Lusch 2016) This process is presented and simplified in Figure 2.



**Figure 2.** Value co-creation process (adapted from Vargo and Lusch 2016, p.7)

Another explanation of the value co-creation process is described by Payne, Storbacka and Frow (2008). They maintain that the value co-creation framework in B2B relationships consists of three components: customer value-creating processes; supplier value-creating processes; and encounter processes. The customer value-creating processes are those the customer utilizes to manage its business and relationships with suppliers to achieve a particular goal. In contrast, supplier value-creating processes are those that the supplier uses to manage its business and its relationships with customers and stakeholders. The encounter processes are located between the customer-supplier relationships, and they must be developed to create opportunities for value co-creation. They include duplex interactions and transactions between the supplier and customer. (Payne, Storbacka and Frow 2008)

All encounters between the customer and supplier are important, and together the encounters form an accruing contribution to co-created value. The company requires a long-term view of customer relationships, rather than short-term financial targets. Different kinds of customer relationship must be considered, and communication and value propositions adapted accordingly. Long-term relationships require a different approach to new customers that are unable to build their learning according to the supplier. (Payne, Storbacka and Frow 2008)

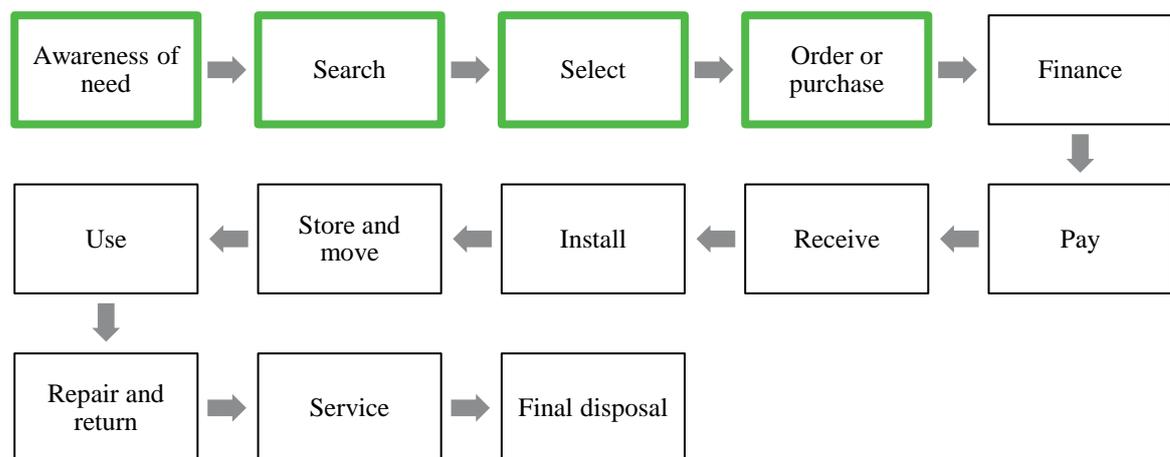
### **2.3 Customer-centricity in sales and marketing**

Companies have increasingly re-oriented from manufacturing toward services and S-D logic (Vargo, Lusch and Koskela-Huotari 2019), and shifted to providing integrated solutions that combine services and products to meet customer needs (Brady, Davies and Gann 2005; Davies, Brady and Hobday 2007). Reorientation from company-centric conventional approaches to S-D logic enables companies to be more customer-centric in their business (Bettencourt, Lusch and Vargo 2014). According to Parniangtong (2017), a customer-centric company emphasizes creating customer relationships that achieve lifetime value and focuses on keeping its customers, rather than considering customer purchases simply as transactions and focusing on profit. However, according to Bettencourt, Lusch and Vargo (2014), customer-centricity is still highly company-centric in practice. Companies are primarily concerned with trying to sell more of what they produce than creating strong customer relationships (Bettencourt, Lusch and Vargo 2014).

Central to S-D logic is that a service-centered view is inherently relational and customer-oriented (Le Meunier-FitzHugh et al. 2011). According to Lusch and Vargo (2006), S-D logic shifts the marketing orientation from a “to market” philosophy, where the customers are targeted, promoted to, and captured, to a “market with” philosophy, where the customers and suppliers are collaborators in the marketing process. Le Meunier-FitzHugh et al. (2011) state that the success of building trust and enduring relationships depends on the company representatives’ ability to manage the customer relationship, meet customer needs and

deliver solution packages on time in agreement with sales personnel. Sales functions are one of the primary interfaces with the purchaser: The major part of the ability to create excellent customer-centric performance focuses on sales and marketing (Le Meunier-FitzHugh et al. 2011; Siahtiri, O’Cass and Ngo 2014; Parniangtong 2017).

Typically in B2B, a salesperson or nominated sales team handles the entire sales process from start to finish. The sales cycle may take months or even years, and there are no handovers during the cycle. A good sales process develops a shared understanding in the organization, and evolves and lives through the project. Flexibility is vital in effective selling. (Rackham 1997) According to Cespedes (1994), there are five basic activities in a traditional B2B sales role: contacting customers, selling the product or service, servicing the account, working with wholesalers, and managing information between the seller and the purchaser. These activities have also been completed with long-term strategic roles, such as sales forecaster, customer partner, purchase behavior expert, and technologist (Wilson 1993; Moncrief and Marshall 2005). Traditionally, sales and marketing specialize in the first activities of a customer consumption chain, which is a presentation of linked activities in which customers engage when their needs are being met (McGrath and MacMillan 2005). These activities are awareness of need, searching, selecting, and purchasing. A typical consumption chain for a manufactured product is presented in Figure 3.



**Figure 3.** Consumption chain of a manufactured product (adapted from McGrath and MacMillan 2005, p.16)

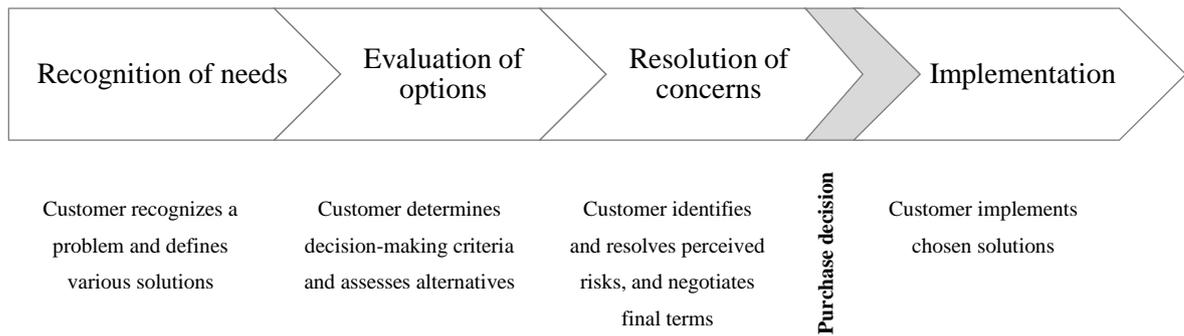
Central to S-D logic is that a company can only offer value propositions without being able to deliver value *per se* (Vargo and Lusch 2004). Le Meunier-FitzHugh et al. (2011) state that since sales personnel are a key touchpoint for customers through their tailoring of the offer and control of the integration of the company's activities, it is vital that they can understand the value of their offer as the customer perceives it. They can then alter the offer according to the customer's feedback and requirements (Le Meunier-FitzHugh et al. 2011). Salespeople are required to recognize customers' specific problems by two-way communication with them to enable the customization of the product, or service features and benefits (Doyle 2002; Le Meunier-FitzHugh et al. 2011). The identification of needs, priorities, and learning generation must be quick and perceptive (Kalaiganam and Varadarajan 2006; Piercy, Cravens and Lane 2007), because customers can be unclear of their needs and do not wish to invest time in exposing them (Peppers and Rogers 1997; Rust and Thompson 2006; Moskowitz and Gofman 2007). According to Le Meunier-FitzHugh et al. (2011), the importance of problem identification and exploration through conversation and dialogue has been emphasized in the companies that have adopted integrated solutions and a service-oriented approach. The authors state that this has led to more interactive and stronger relationships between sales personnel and customers.

Shifting from G-D to S-D logic changes the emphasis from knowledge of product-based solutions, features, and benefits to management of knowledge in creating competitive advantage with customers (Le Meunier-FitzHugh et al. 2011). According to Le Meunier-FitzHugh et al. (2011), since both sales and marketing teams function strongly at the customer interface, they should work and communicate closely together, and the marketing team should actively inform the sales team of their ambitions and objectives. Marketing can extend the sales relationship with the customer from a single purchase to a long-lasting relationship through additional service offers and a shift from product to customer orientation. Again, the sales team should respond to marketing's actions and provide feedback from the customers that can assist in revising the knowledge and adjusting the understanding of the market, and further establishing new initiatives. Furthermore, they can utilize their customer-sensing and relationship-building skills to develop long-lasting customer relationships. Knowledge obtained from sales and marketing's interaction with the

customer helps the company to create new offers and adapt current ones according to customer and market needs. (Le Meunier-FitzHugh et al. 2011)

In addition to collaboration between sales and marketing, S-D logic and integrated solutions require all internal and external networks to work impeccably together to provide superior solutions for customers. Thus, sales personnel play a strategic role in promoting communication, acting as an intermediary between the networks, and aiming for the level of service the customer requires. (Le Meunier-FitzHugh et al. 2011)

The supplier must ensure that the standards in each phase of the purchase process are consistent, and the experience is highly positive and effortless for the customer (Parniangtong 2017, p.168). For suppliers, it is vital to develop a deep insight into what customers care about and why. Perceiving the customer's purchase phases can help sales and marketing to understand the customer. According to Rackham (1997), there are four distinct purchase phases of a customer: recognition of needs; evaluation of options; resolution of concerns; and implementation. In the first phase, the purchaser begins to understand the problem that requires a purchase and starts to look for a solution. In the second phase, the purchaser determines criteria for decision making and evaluates options accordingly. Next, he or she resolves observed risks and barriers, and negotiates final terms. Based on these, the purchaser makes the buying decision. Finally, the purchaser focuses on the implementation of the chosen solutions. (Rackham 1997) The links of the process must be fully connected, and the customer experience coherent, because customers evaluate the total experience as a whole (McGrath and MacMillan 2005). A purchase process model adapted from the study by Rackham (1997) is presented in Figure 4.



**Figure 4.** Purchase process model (adapted from Rackham 1997, p.45)

Le Meunier-FitzHugh et al. (2011) state that in addition to the previous aspects, the concept of the co-creation of solutions strongly affects sales activities, with two major implications. First, the sales team must make a judgment of the limits of choice. Making such a judgment is important, because the customer may be overwhelmed by excessive options (Schwartz 2004; Moskowitz and Gofman 2007) or reluctant to engage in comprehensive discussions (Woodruff and Flint 2006). Sales personnel are required to identify customers' preferences appropriately in this regard (Le Meunier-FitzHugh et al. 2011). Rule Developing Experimentation by Moskowitz and Gofman (2007) offers an example of a method that salespeople and developers can utilize to facilitate the discovery of customer needs. The method can help encourage the customer to choose the offer the company provides by identifying and exploring the factors driving customer interest (Moskowitz and Gofman 2007). According to Le Meunier-FitzHugh et al. (2011), the second implication of value co-creation is the management of the customer engagement location. The authors state that the location must optimize the quality of engagement and interaction between the company and customer, and support them with appropriate resources.

### **3 CUSTOMER EXPERIENCE AND ITS DIGITALIZATION**

Recently, customer experience has been of increasing interest to both companies and researchers. A study by Accenture (2015: in cooperation with Forrester Consulting) found that improving customer experience was one of the most important business priorities for companies for the following year. Service organizations have increasingly leaned towards the customer experience and view it as a source of sustainable competitive advance (Teixeira et al. 2012). However, according to a study by Gibbons (2017), B2B companies have yet to master meeting customer needs and creating a successful customer experience.

In addition to companies, customer experience is also a trend in research. The Marketing Science Institute (2016) rated customer experience one of the most important research challenges for coming years. Currently, customer experience has been studied significantly more in the B2C context, and research focusing on B2B customer experiences is considerably more limited (Zolkiewski et al. 2017). Nevertheless, although business occurs between companies, B2B decision makers are also people (Filenius 2015), and B2B can learn from studies conducted initially for B2C.

This chapter discusses the customer experience. It begins with an introduction to the definition of customer experience. The second subchapter introduces the reader to the digital customer experience. The last subchapter gives an overview of how to create a successful digital experience.

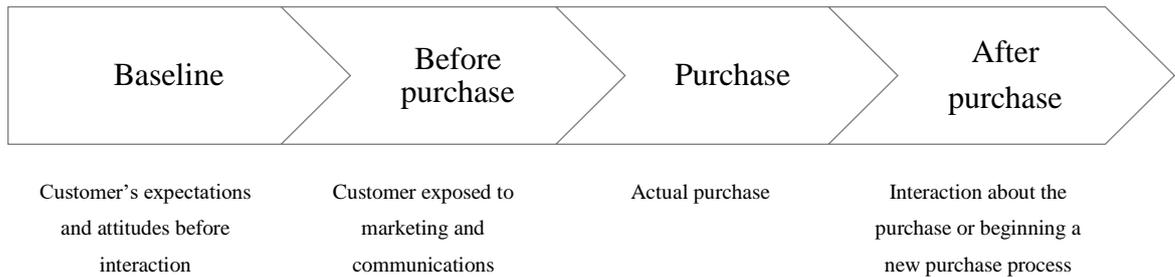
#### **3.1 Definition of a customer experience**

In a study by Meyer and Schwager (2007), customer experience is defined as a customer's internal and subjective reaction to direct or indirect contact with a company. Löytänä and Korteso (2011) define customer experience as the sum of encounters, images, and emotions that a customer formulates about a company. According to a study by McColl-Kennedy et al. (2015), a customer experience involves the customer's emotional, affective, cognitive, social, and physical reactions to contact with the service provider, product, or brand during

the customer journey. The study notes that the customer experience is created by elements the service provider can and cannot control. Controllable elements include aspects such as atmosphere, assortment, service interface, and price; and uncontrollable elements include aspects such as influence of other customers. In the S-D logic perspective (Vargo and Lusch 2004), customer experience is not designed but co-created through customer interactions with service elements. The organization cannot design customer experiences, but services can be designed for the customer experience (Patrício et al. 2011).

Customer experience management (CEM) is a discipline and methodology created to manage and improve customer experiences in a company (Dandridge 2010). It considers all subareas of the company, and its goal is to create significant experiences to maximize value for the customer and revenue for the company (Löytänä and Korteso 2011). Dandridge (2010) presents three foundational tools that implement CEM into a business: seeing through the customer's eyes; listening to the customer; and empowering all employees. According to Löytänä and Korteso (2011), all operations are either directly or indirectly in contact with the customer, although sales and customer service are often the operations that have the most interaction with customers. Other operations of the company have a significant effect on how the sales and customer service are able to create customer experiences that exceed expectations (Löytänä and Korteso 2011).

When a customer interacts with the company through several channels, the customer experience can be perceived in four stages: baseline; before purchase; purchase; and after purchase (see Figure 5). Baseline stage includes the customer's expectations and attitudes toward the company before directly interacting with it. Before purchase, the customer is exposed to the company's marketing and communications and can spend a long time making a purchase decision. In the purchase stage, the customer has made the decision to buy from the company, and an actual purchase occurs. After purchase, the customer and the company continue to interact about the purchase or begin a new purchase process. (Filenius 2015)



**Figure 5.** Four phases of customer experience (adapted from Filenius 2015, p.24)

Since companies' service quality has become increasingly standardized, customers seek an experience in which they are actively involved and co-creating value (Lusch and Vargo 2006; Meyer and Schwager 2007). According to Meyer and Schwager (2007), a good B2B customer experience is not thrilling, but functional, trouble-free, and reassuring. The company solves its customer's problems, thus helping them serve their customers in turn (Meyer and Schwager 2007). The company must ensure that experiences are positive and consistent, and it must maintain the same standards at all contact points with the customer (Parniangtong 2017, p.168). Research studies outline that a positive customer experience produces satisfaction, re-purchase intention, loyalty, and trust (Meyer and Schwager 2007). According to Gibbons (2017), customer experience is one of the best ways to create a competitive advantage. To function in practice as a competitive advantage, the customer experience must be divided into smaller components, such as a fast purchase process or the ease of obtaining required information (Filenius 2015).

A study by Gibbons (2017) found that three customer expectations stood out from the others: personalization, ease, and speed. B2B customers experience the benefits of these three elements in their personal life as consumers and expect them in their professional life too. According to the study, B2B companies are not prepared to meet demands, and fewer than 10 percent rated their company effective in meeting customer demands. In Chapter 3.4, customer demands in the creation of a successful digital customer experience are covered in more detail.

### 3.2 Digital customer experience

Digital services have become increasingly common, and customers' expectations have increased (Filenius 2015). Understanding and providing a successful digital customer experience has thus become a critical asset, and managers, scholars, and consultants consider digital customer experience an upcoming field of competition (Filenius 2015; Klaus 2014). According to Filenius (2015), a digital customer experience is created when a user utilizes any device with a digitally produced service to conduct a desired operation or part of it. However, Klaus (2014) states that the digital customer experience is highly context-specific, and it is unlikely that generally applicable rules can be generated for all industries and company strategies. Besides the digital customer experience, the term "online customer experience" is also used, and it further outlines the customer experience of the online environment (McLean 2017). According to Rose et al. (2012, p.309), an online customer experience is defined as a "psychological state manifested as a subjective response to the website." In this thesis, the term "digital customer experience" is the term principally used, because it includes online and other digitally produced services, e.g. offline mobile applications.

Customer experience has been discussed principally in the offline context, and the digital customer experience especially in the B2B context has been lacking in research (McLean 2017). In particular, there is a limited understanding of customer experience and what influences it on B2B websites (McLean and Wilson 2016; McLean 2017). Nevertheless, retrieval and reconciliation of information occurs on the Internet for both customers and businesses, and customers have high expectations of the digital and online environment and service quality (Flavián-Blanco, Gurrea-Sarasa and Orús-Sanclemente 2011; Grönroos and Voima 2013).

According to Duboi and Clementino (2017), B2B companies have a low invocation of digital customer experience compared with B2C. They argue that this low invocation originates from the B2B characteristics of transactions, buying behavior, and technology. They state that B2B transactions are complex and involve more money and risk compared with B2C.

The B2B purchase process requires human interaction and personal relationships between the buyer and the salesperson, and business relies on personal selling (Mudambi 2002; Dubois and Clementino 2017). Offerings are customized and highly complex in B2B compared to offerings in B2C, where offerings are generally standardized, enabling mass marketing (Mudambi 2002; Dubois and Clementino 2017). Nevertheless, according to Dubois and Clementino (2017), B2B buyers seek speed of transaction and convenience, and are beginning to prefer self-service channels, especially for reorders. Their article states that this pressures suppliers to digitalize such touch points with their customers.

The digital customer experience is influenced by the numerous components the customer encounters in operating in the digital environment, such as ease of use, customization, interactivity, engagement, website credibility, information quality, website aesthetics, and flow (Hoffman and Novak 2009; Rose et al. 2012; Martin, Mortimer and Andrews 2015; McLean and Wilson 2016; McLean 2017). Since the B2B customer experience is not thrilling, investigating the potential influences of these variables on customer experience is important (Meyer and Schwager 2007; McLean 2017). Managing and optimizing the customer experience in digital services require the leveraging of several methods and tools as part of the company's instruction and decision-making process. Such tools and methods include using web analytics, real-time monitoring of the customer experience, utilizing customer feedback, and A/B testing (randomized testing with multiple variables). (Filenius 2015)

### **3.3 Creating a successful digital customer experience**

This subchapter describes ways of creating a successful digital customer experience. According to Filenius (2015), a successful digital customer experience is formed when the customer need is understood correctly, processes support its implementation, systems support the processes, and the usability of the digital service represents the understanding of customer behavior. McGrath and MacMillan (2005) state that a company can digitalize links in the consumption chain by replacing or combining links to make the offering simpler, more user-friendly, convenient, and informative. The company can add a compelling parallel

offering it can use to differentiate itself from its competitors. Consequently, the customer experience offers enhancement by becoming generally better, cheaper, or more convenient (McGrath and MacMillan 2005). This chapter focuses on the most important elements that create a successful digital experience, focusing on both general and practical factors.

According to Gibbons (2017), to provide a generally satisfied digital customer experience, the company needs to be customer-centric and understand the customer's perspective. Every employee must be committed to make their business faster, easier, and more personalized (Gibbons 2017). McGrath and MacMillan (2005) state that although B2B customers evaluate their total experience as a whole, companies typically slice the consumption chain to reflect the specializations of different functional groups. This approach may be helpful for the company, but it can create a disjointed customer experience (Gibbons 2017; McGrath and MacMillan 2005). Hence, companies should break down the silos of functions and provide a smoother experience through more unified functions (Gibbons 2017). To achieve this, Flodin and Norton (2011) suggest creating a customer experience blueprint that provides a treatment model for all interaction channels. According to the authors, a customer experience blueprint maps all resources against customers' expectations, and the most critical service needs help in delivering excellent customer experiences.

Productivity is an important asset for B2B customers. According to McGrath and MacMillan (2005), when the company can transform something from being bothersome and complex to being more convenient and quicker to accomplish, there is a great potential for success. Saving customers' time and eliminating annoyances increase customer productivity. According to the authors, creating a single point interface between the company and its customers is one way of saving customers' time and creating an easier and quicker way to operate.

According to Filenius (2015), the first practical challenge the company encounters when trying to create a successful digital customer experience is the service's availability. Digital availability is a combination of data communications, and data terminal equipment and service. Filenius states that, in general, the service provider cannot affect the functionality

of data communications. If the data network is slow or does not function, the customer cannot access the digital service and, regardless of the source of the difficulties, the customer often blames the service provider. Thus, Filenius suggests that the company needs to ensure that service is provided from a platform that is designed professionally and qualitatively to avoid failure. In addition, it is important to consider customers using a slow Internet connection, since the quality of data connection varies depending on factors such as area, user numbers, and operator (Filenius 2015). Globally, there are areas with low or no Internet connection (Filenius 2015; Kirkpatrick 2018), and according to Statista (2019a) the global average Internet penetration rate in January 2019 was 57 percent. A low ability to get online is especially characteristic of developing regions such as parts of Africa and Asia, since the Internet infrastructure is too weak to allow citizens to adequately access it (Kirkpatrick 2018; Statista 2019a).

In addition to data communications, Filenius (2015) states that data terminal equipment and service are another factor in a digital service's availability. Mobile devices are increasingly used to access the Internet, and according to Statista (2019b), 52 percent of all website traffic globally is generated through mobile phones. An online service exclusively designed for desktops is slow and does not properly scale on the smaller screen (Filenius 2015). In addition, graphical elements load slowly. Thus, according to Filenius (2015), a digital service must be designed for mobile devices. Filenius states that, in general, there are three possibilities to develop a service that works on various devices: responsive web design, mobile-optimized websites, and applications. Responsive web design is used to adapt a website and its elements to different scenarios, irrespective of the device or its screen resolution (Plechawska-Wojcik and Kesik 2014). Mobile-optimized websites are separate parallel websites optimized for mobile devices where the user is redirected from the desktop version when mobile use is recognized (Filenius 2015). As an option for mobile-optimized websites, many companies offer mobile applications that the user can download to their device (Filenius 2015).

As a result of information overload, connected networks, and options, today's customers value simplicity (Gibbons 2017). McGrath and MacMillan (2005) state that eliminating

complexity is one of the best ways to transform the offering to attract the customer. If the offering is complex with too many options, features, and functionalities, the customer may find it unsatisfactory and wish not to use it. McGrath and MacMillan suggest discovering what customers truly want and will pay for, and eliminating everything that does not meet these criteria. According to a study by Filenius (2015), in a successful digital service, finding and purchasing should be made easy for the customer, and any search complexity must be removed. An internal search should be invested in for the customer to find the right information as quickly as possible, because the easier it is to find the required information, the more satisfied the customer will be (Filenius 2015). Navigational menus and hyperlinks should be placed, sequenced, and named based on the customer's intuition (Yang, Jun and Peterson 2004). In addition, the language used in the digital service should be understandable to users, and all internal company slang should be eliminated (Filenius 2015).

Time is valuable for customers, and they cannot wait for their problems to be addressed (Gibbons 2017). The experience with the service providing company must be smooth, and problem solving as fast as possible (Yang, Jun and Peterson 2004; Filenius 2015). Yang, Jun and Peterson (2004) state that customers feel frustrated if they encounter misbehaving or excessive components on a website. They note that many components, such as graphics and advertisements, slow the download speed and must be kept reasonable. According to Everts (2013), users become impatient if the rendering of a page takes more than two or three seconds.

Yang, Jun and Peterson (2004) state that customers are often concerned about the privacy and security of online services, and a lack of security is a great obstacle for a digital service. Thus, companies must be very responsible with the customer's security and privacy. Privacy and security measures should be clearly stated to create trust between the company and the customer. However, a balance between security and ease of use must be kept, because complex security measures may disturb the user and discourage them from using the digital service. (Yang, Jun and Peterson 2004)

Personalization is one of the evolving expectations of B2B customers according to a study by Gibbons (2017). Gibbons states that customers want service providers to understand their needs and personalize the experience accordingly. According to Filenius (2015), personalizing the experience requires a sufficient amount of customer data, which companies often have in their databases. Utilizing marketing automation, data can be used in the right situation, creating a personal experience.

McLean (2017) emphasizes the importance of website credibility and information quality to achieve a positive customer experience. McLean refers to website credibility as the evaluation of the site's key surface characteristics, such as the ease of contacting the company, the website's brand, the URL, and website aesthetics. The quality of the information is referred to as the relevance, accuracy, and usefulness of the information on the website, as well as how current the information is. To ensure the credibility of a website, the service provider must confirm the ability to contact the company through the website, accreditation of the company, and professional design. In addition, they need to verify that there are no broken links or grammar or spelling mistakes. To ensure information quality, the service provider can provide data on the source of the information to approve its precision and correctness. Customers can be positively affected by a credible website with high-quality information, thus increasing customer satisfaction. (McLean 2017)

According to McLean and Wilson (2016), interactions between customer and supplier are limited in the online environment compared to the offline environment, and customers are often left to deal with the service themselves. Interaction with the computer is emphasized in an online environment, since the computer is seen as the social actor of the online experience rather than a medium (Lee and Jeong 2012). According to McLean (2017), if the customer is unable to find the required information, they seek customer support to help them in their search. Even the customers who find the service credible may need customer support, and if they are unable to seek it, they often abandon the service (McLean 2017).

As discussed, multiple elements and aspects affect the success of a digital customer experience. Since some elements may affect each other negatively, e.g. security on

smoothness and ease of use, they need to be optimized suitably to ensure the best possible experience. To summarize, the elements of a successful digital experience are

- a customer-centric culture,
- increasing the customer's productivity,
- availability,
- simplicity and ease of use,
- smoothness and speed,
- security,
- personalization,
- website credibility and information quality, and
- interactivity and customer support.

Filenius (2015) notes that creating a successful digital service can be challenging. The information technology (IT) development project must therefore be carefully planned. Developers can create a roadmap according to which the development process will be initiated gradually. Development steps should be kept small, and each step should create something new and more valuable for the customer. The project should be flexible, and there should be the possibility of changes and compromises if the customer's benefit requires them. In addition, the development process should include a comprehensive group of people from the organization. Including the IT department, at least personnel from the sales and marketing department, as well as from customer service, should be involved. In addition, the group of developers must be motivated and ambitious to succeed. (Filenius 2015)

Customers should participate in the development, and the developed service must be tested with actual customers. Testing is often left only to IT specialists, and testing is incomplete, since the testers know how the system works, and they are unable to put themselves in the customer's place. By participating in development and testing, the customers provide their thoughts and experiences for the new service. The company must test if the customer knows how to use the created solution, and if the solution benefits the customer. (Filenius 2015)

To succeed in a digital development process, goals must be realistic. The budget, schedule, and resources must be carefully and honestly measured. Resources and budgets must also be directed at the marketing, maintenance, and operation of the service that continues after the launch, as well as further development. Moreover, developers should not solve too many problems at once. This can lead to complicated sites, where the customer cannot find the information they need, and mistakes and defects are left unnoticed. Instead, developers should do one thing at a time as well as possible. Altogether, the goal of the customer's benefit must direct the entire process. (Filenius 2015)

## **4 METHODOLOGY**

This chapter describes the sales module development for the Valmet Customer Portal. First, the research design used in the thesis is presented, followed by an introduction to the basis for starting the development. Next, the present state of the sales process and communication is researched using internal interviews, and the customer perspective of communication and the customer portal is researched using customer interviews. Data collection is described, and the gathered data is analyzed in both kinds of interview.

### **4.1 Research design**

The research is conducted using qualitative methods. Qualitative research studies the meanings of participants and relationships between them (Saunders, Lewis and Thornhill 2016, p.169). The development of the sales module started with internal and external qualitative research to understand the needs and perspective of the main users. The research design can be described as exploratory, since it aims to discover what is happening and obtain insights concerning the chosen topic (Saunders, Lewis and Thornhill 2016, p.174).

Interviews were chosen as the data collection method for both internal and external research, because they enable the flexible collection of comprehensive data. Both types of interview were executed as semi-structured interviews. Semi-structured interviews are classified as semi-standardized interviews in their structure and preparation, since some aspects of the interview are predetermined, while some are left to be improvised (Hirsjärvi and Hurme 2015, p.47; Wengraf 2001, p.5). In general, a question framework is built beforehand, but the order of questions can be changed during the process (Hirsjärvi and Hurme 2015, p.47).

The main focus is on the customers' answers and opinions, since the portal is designed to fulfill their needs and improve their experience. The module is designed on the basis of the results of the interviews.

## **4.2 Basis of sales module development for Valmet Customer Portal**

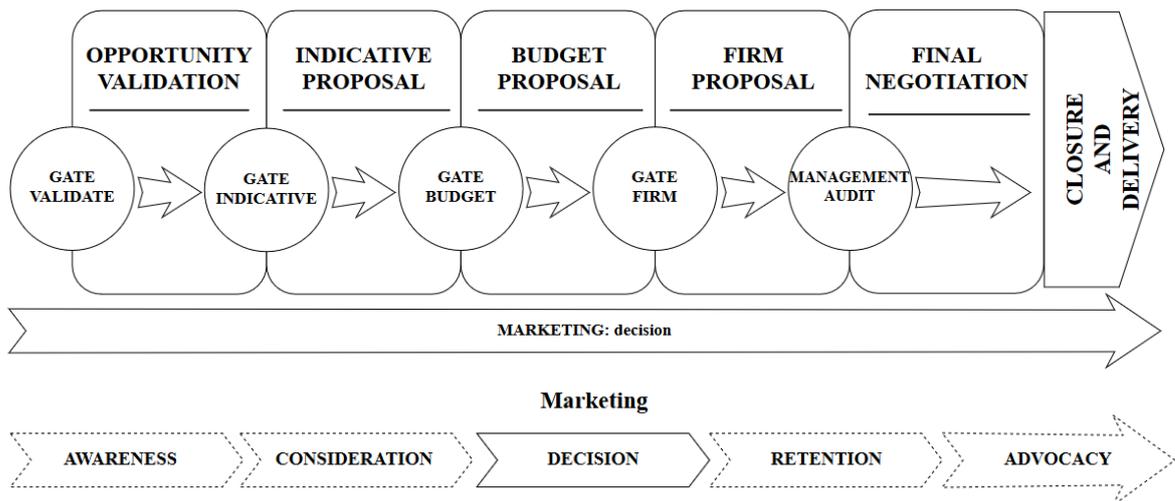
In 2018, Valmet launched an online customer portal to continuously cooperate with the customer and share information in real time. The customer portal was designed to be a digital collaboration space between Valmet and the customer. The aim of the portal was to improve the customer experience and accelerate operations and service, thus adding more value to the customer. Several modules were launched in 2018, and they were already being used by some customers. (Valmet 2019a)

By the spring of 2019, five different modules had been designed to facilitate everyday collaboration. The first helped customers find solutions for their problems by contacting Valmet experts, starting group discussions, and finding documents. The second assisted customers to select courses provided by Valmet to help them build their knowledge and competences. The third was designed to help customers and Valmet create a shared roadmap with schedules to ease collaboration between companies. The fourth was an e-commerce platform for finding and purchasing spare and ware parts. The last module was connected to the Industrial Internet, allowing customers to monitor their product's operation parameters and the most important key performance indicators through the customer portal. (Valmet 2019c)

Capital sales at Valmet wished to examine how the customer portal could be utilized in sales and marketing by creating their own module designed for them. PM capital sales offer customers board and paper machinery, and equipment and machine rebuilds for the board and paper industries globally (Valmet 2019b). The company's formerly product-focused thinking has been gradually moving to a service-focused approach, and the sales and marketing departments have been involved in the change. PM capital sales also desired to offer their customers improved experiences through digital tools, thus differentiating themselves from their competitors. Since the 1990s, Valmet has implemented annual customer satisfaction interviews in the PM business unit. According to face-to-face interviews from 2018 and 2019, communication and documentation are already in a good

state, but there are still opportunities for improvement. The customer portal was thought to offer a potential way to enhance the customer experience.

Project sales are complex and have a long time span. The projects require a lot of documentation, and sales teams are large. The PM capital sales follows a common sales process guideline during every project. A sales case starts with opportunity validation and moves gradually through indicative, budget, and firm proposals to final negotiation. If the case is won, it closes and is delivered to the project department. The sales phase gates located between each phase shift the process further. Marketing's role starts long before the sales project begins. It supports the sales process through the whole project and continues after the purchase decision. The sales process is visualized in Figure 6.



**Figure 6.** Sales process (source: Valmet internal 2019)

The sales module needs to acknowledge the characteristics of capital sales and fulfill the needs of customers by facilitating cooperation and communication with Valmet. The characteristics and customer needs and interests are sought by means of interviews in the following subchapters.

### **4.3 Present state of sales process and communication**

This subchapter presents the research on the present state of the sales process and communication. Data collection using internal interviews is presented, following the analysis of gathered data. The research was executed as a qualitative study, and internal interviews were conducted to understand and clarify the current sales process and communication between the company and customers.

#### **4.3.1 Data collection**

Internal interviews were conducted as semi-structured interviews at Valmet capital sales locations in Finland. A total of 28 people were interviewed from both business lines during April, May, and June in 2019. Sixteen participants were interviewed face-to-face, and 12 via video conference calls. Only one selected and contacted employee could not participate in the interview due to time limitations.

The sample was designed to be as comprehensive as possible to achieve a reliable and diverse perspective of the current state of sales processes and communication. The PM target group was 79 employees working at Valmet Paper Mills' capital sales and marketing department; the P&E target group was slightly smaller. Interviewees were not chosen completely randomly, since the aim was to acquire information from different sales positions. The sample was therefore designed to fit as many different positions as possible in all PM capital sales teams. Later, the sample from P&E was formed largely through the snowball sampling technique presented by Saunders, Lewis and Thornhill (2016). In snowball sampling, contact is first made with one case in the population, and they are asked to identify further cases to be interviewed (Saunders, Lewis and Thornhill 2016, p.303). The sample was based on voluntary participation, since at the beginning there was no clear list available of employees working in Valmet P&E sales and marketing. Names of possible interviewees were sought from one person working in the desired group, who provided a list.

Interviews were conducted in Finnish, since it was the native language of all the interviewees. The interview framework in Finnish and a translated version in English can be found in Appendices 1 and 2. One hour was reserved for each interview, but the actual length of interviews ranged from 35 minutes to 80 minutes. The average duration was 51 minutes. Interviews were recorded and later analyzed from the recordings. The sample of 28 employees was large, giving a reliable overview of different positions, opinions, and ideas.

The interview framework consisted of 17 questions. Most questions were open, designed to obtain extensive information and comments on the subject. The first theme concerned communication with customers. Interviewees were asked about their communication habits, needs, and tools. They were asked if they used a systematic communication method, and if there were differences in communication between different customers. In addition, interviewees clarified how they saved email conversations, meeting memoranda, and other notes in shared databases. The final question about communication in the framework concerned whether the customer could reach the required Valmet salesperson.

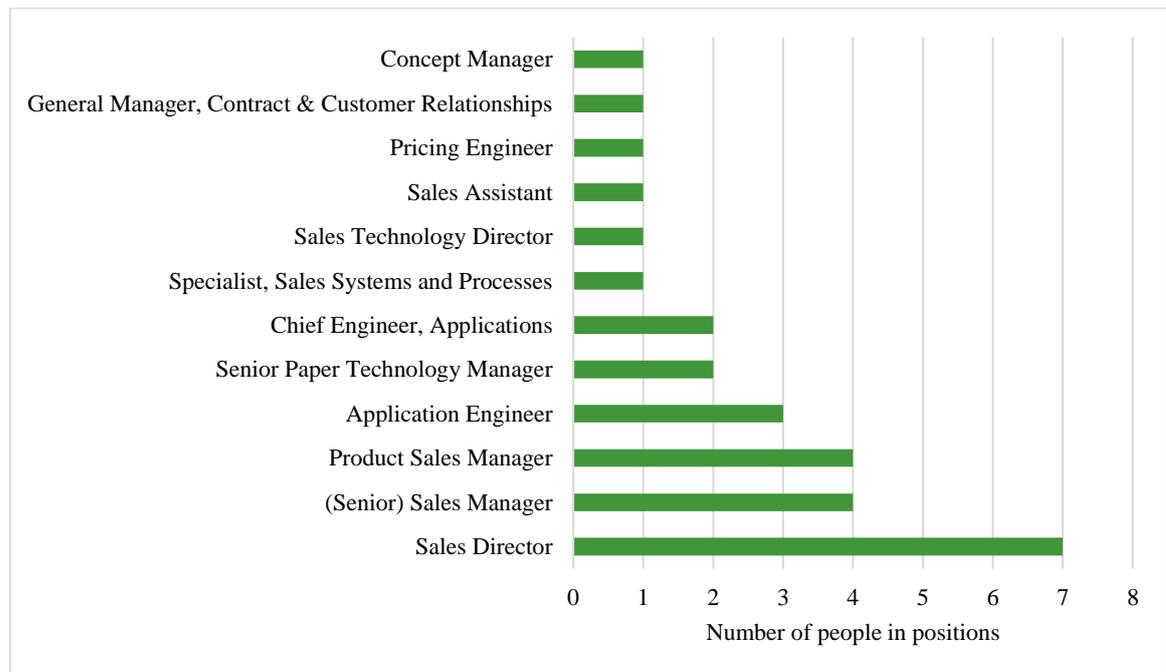
The next theme was documents and material delivered to the customer. Interviewees were asked which documents were delivered to the customer, how they were provided, and if there were clear instructions on how this should be done. Interviewees were also asked to clarify how personnel felt about the present system's information security. Next, the interviewees were introduced to the current portal, a video was presented, and information given about future objectives, since most were unaware of the portal before the interview. After the presentation, interviewees' thoughts concerning the customer portal and opinions about how it could be improved to meet the requirements of sales personnel were sought, as well as the information they thought could be added to the portal, and how they thought customers would feel about it.

#### 4.3.2 Data analysis

The data was analyzed from the recorded interviews. The recordings were listened to after the interviews, and participants' answers added to the original question framework.

Interviews were not strictly transcribed, since they were casual, and interviewees' narratives often shifted from the original point, especially after the portal presentation. Furthermore, ideas and comments were more important than the wording. The collected information was sorted and analyzed using Microsoft Excel.

All the participants worked at Valmet capital sales and marketing in Jyväskylä, Järvenpää, Tampere, Ulvila, and Vantaa, all in Finland. The sample was chosen to cover as many different positions as possible in all sales teams. Seventy-five percent of interviewees were from PM; 25 percent were from P&E. The 28 interviewees had 12 different positions. The positions of the interviewees are presented in Figure 7.



**Figure 7.** Positions of interviewees

Within 12 different positions, there are significant differences in communication with customers. Sales managers and product sales managers communicate most with customers, and they are often the key contact between the company and customer, along with the mill sales managers. Product sales managers are responsible for single product sales, and sales managers or senior sales managers are responsible for the entire board and papermaking line sales. They lead the team and negotiations of a sales project. The second largest group of

those who communicate with customers are the paper technology managers. They are mainly responsible for the technical solution and guarantees. Sales technology managers coordinate their work and additionally perform the same tasks as paper technology managers. The general manager of contract and customer relationships is mainly responsible for contracts and their negotiations. The concept manager develops new concepts and presents them to customers. Sales directors coordinate sales projects, and depending on the person, they may act as a sales manager.

There are many back office roles in the sales department that usually do not work at the customer interface. Application engineers and chief application engineers are responsible for application work and documentation, especially technical specifications. They sometimes take part in technical meetings with the customer in a specialist role. Pricing engineers undertake customer and internal pricing for a sales project. They rarely interact directly with customers. Sales assistants are not in direct contact with the customer, with the exception of sending confirmations and similar documentation via email. Sales systems and process specialists only have internal customers and are responsible for the development of sales tools.

A summary of communication in the different positions is presented in Table 2. Some participants had another role in addition to their primary role, e.g. a sales director had similar duties to a sales manager, or a concept manager worked partly as a paper technology manager. This has been taken into consideration, but for clarity the summary table considers the most notable role of the participant to avoid overlaps.

**Table 2.** Communication in different positions of interviewees

<b>Position</b>	<b>Amount of direct communication with customer</b>	<b>Subjects of communication</b>	<b>Other responsibilities</b>
Product Sales Manager	Very high	Key contact. Commercial, contract, guarantee, and technical negotiations.	Sales project team leader. Creating strategy and leading negotiations.
(Senior) Sales Manager	Very high	Key contact. Commercial, contract, guarantee, and technical negotiations.	Sales project team leader. Creating strategy and leading negotiations.
Senior Paper Technology Manager	Very high or high	Technical and guarantee negotiations.	Responsible for technical solution creation and guarantee preparation.
General Manager, Contract and Customer Relationships	Moderate	Contract negotiations.	Contract layouts and updates.
Sales Technology Manager	Moderate	Technical and warranty negotiations.	Leading the paper technology managers. Occasionally responsible for technical solution creation and guarantee preparation.
Concept Manager	Moderate	Presentation of concepts and new solutions.	Concept development.
Sales Director	Moderate or low	Final and contract negotiations.	Coordination of sales projects.

**Table 2.** Communication in different positions of interviewees (*continued from previous page*)

<b>Position</b>	<b>Amount of direct communication with customer</b>	<b>Subjects of communication</b>	<b>Other responsibilities</b>
Application Engineer	Low to moderate	Technical specifications. Answering customers' questions.	Application work and preparation of customer documentation.
Chief Engineer, Applications	Low to moderate	Technical specifications. Answering customers' questions.	Application work and preparation of customer documentation.
Pricing Engineer	Low	Pricing.	Customer and internal pricing.
Sales Assistant	Low to none	Confirmations via email.	Assisting in sales projects
Specialist, Sales Systems and Processes	None		Internal customers. Main user and developer of sales tools.

Respondents primarily agreed concerning the most used communication tools. Some differences occurred between positions. Face-to-face meetings were used as the main communication method in positions closest to the customer. The most important factors in favor of face-to-face meetings were the ability to create personal relationships and have mutual contact with customers, as well as observing their body language and interest. Video conference calls have become more common and complement face-to-face meetings, but the most important meetings typically took place face-to-face. Video conference calls were often held between major meetings, e.g. to clarify technical specifications and comment on sent material. In addition, video calls were utilized during face-to-face meetings at customers' sites to include specialists from Valmet workplaces without their needing to travel. Interviewees also utilized phone conversations. Email conversations were used in all the positions that communicated with customers.

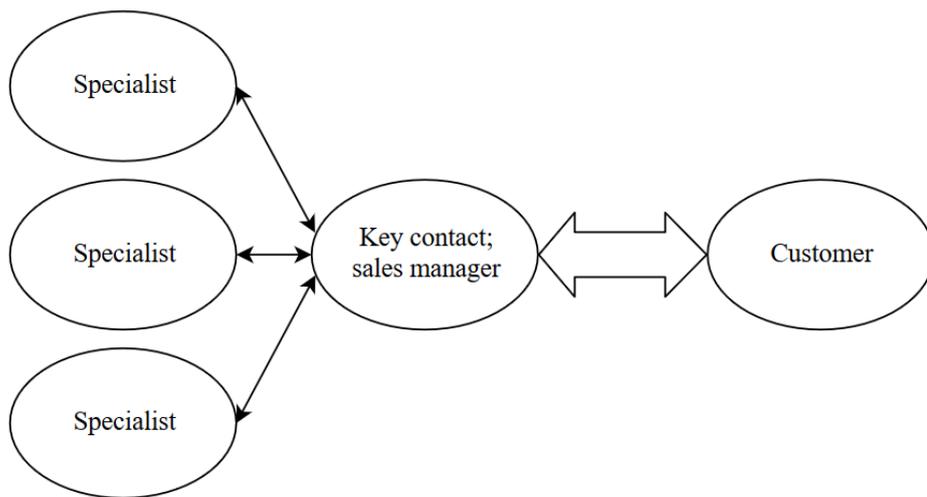
Communication practice varied between customers and regions. Cultural and personal differences were the most significant dissimilarities between customers, although the outline of the sales project generally followed the company's sales process. Cultural differences could be perceived in customs, formality, general precision, straightforwardness, and the speed of the process. Personal differences arose from individuals' characters, the closeness of the relationship, and habits. Other differences affecting the sales process occurred in the customer's experience in purchasing, language skills, standards and needs, customer activity, willingness to give information, and use of communication tools. The supplier often needed to direct the sales process, especially in cases where small companies without a large amount of experience of purchasing were making major investments. Additionally, the need for interpretation affected use of different communication tools, and when there was no common language, meetings always took place face-to-face instead of via video conference. Furthermore, the possible involvement of a consultant firm changed the communication process, and the communication practices followed those of the consultant.

The effectiveness of obtaining required information for a sales project from customers varied considerably. Generally, the information was received either more efficiently through a form and short conversations, or less efficiently after multiple conversations and requests. The efficiency of information acquisition depended on the phase of the sales process, and the beginning was more complicated than later in the project. Typically, the customer could not deliver a great amount of accurate information before they determined objectives for their future investment. The customer's objectives and opinions often developed as the process continued. In rebuild projects, receiving basic information about existing machines was regularly complicated because the project could not be started from the very beginning. Obtaining the required information was generally easier when a consultancy firm was involved and assisted with the customer's purchase process.

Within the company, acquiring the necessary information was found quite easy. Collaboration between employees and departments functioned properly and effectively. Large networks inside the company facilitated the acquisition of information, but occasionally a heavy workload negatively affected the effectiveness. Some interviewees in

back office positions stated that employees at the customer interface occasionally forgot to share information received from the customer at an earlier phase of the project with them.

Communication with a customer typically passed through the key contact of a sales project, who was generally the sales manager. The first contact from customers to Valmet often arrived through the local mill sales manager. Subsequently, the sales manager became the sales team leader and key contact, occasionally with the paper technology manager. Communication was centralized to facilitate the identification of the correct specialist for specific cases, and filtering and coordinating the information load from customer to specialists and vice versa. Interviewees considered customers were satisfied with having one key contact, because this meant the customer did not need to know precisely whom to contact. The communication flow between salespeople and the customer is visualized in Figure 8.



**Figure 8.** Communication flow between salespeople and the customer

The company and customers exchanged a lot of documents. The main documents were technical specifications and offers, including pricing letters and guarantees. Other documents included reference lists, product presentations, marketing material, replies to customers' question lists, calculations, layouts, dimensioning, and estimates. All the interviewees used email as the main tool for delivering material to customers. In addition, some occasionally used Valmet's file transfer application, which allows secure file transfer

between employees, partners, and customers. They used the application exclusively to deliver large files that customers' email boxes were unable to receive. Many interviewees had found the file transfer application difficult to use and decided not to use it. Some participants had not heard of the application before the interview. Public projects in the pulp and energy industry require use of public portals where the quotations are uploaded for more transparent competition. Few interviewees had used an online portal provided by a customer for delivery of material. These portals required login details, and documents were uploaded to the portal to enable the customer to receive material more securely.

Sent and received material, meeting memoranda, and electronic conversations with customers were saved manually into a shared database for all salespeople to easily find the relevant information. Practices used in saving material were varied and depended on the person responsible for saving. In general, salespeople saved important material, and downloading vital material was compulsory. However, not all information was saved because of a lack of time, forgetting to save received material, or considering information insignificant for later use. There were also differences in saving methods, and other salespeople were unable to find information saved with an atypical file name or in an atypical folder. Saving information in a shared database was more systematic in the PM business unit than the P&E business unit.

Customers generally asked for material and presentations that were presented at customer meetings. Salespeople typically sent them a customer version in which all confidential information was eliminated. There were no clear instructions on what material salespeople should and should not share with customers. Interviewees stated that sharing material was a matter of conscience in practice, and common sense should be used to determine what material was appropriate and safe to share with customers.

Concerning information security in sending and receiving material, more than half the interviewees were a little concerned or did not know enough about the company's information security and its effectiveness. A little less than half trusted it, and some stated that the information security level was excessive since it negatively affected daily operations.

Three interviewees were highly concerned about the level of information security and expected securer ways of sending and receiving material. Three interviewees had not thought about the subject before the interview. A major concern was the security of email. Interviewees were not confident about whether or not they should open unprotected files received from customers. Concerning information loss, most interviewees stated that information spreads easily if any confidential information is released.

Most interviewees were satisfied or quite satisfied with the current communication and material delivery to customers. However, a large number stated that they had no points of comparison and were accustomed to the current practices. Some interviewees with a long history at the company stated that they were highly satisfied that in recent decades material delivery had gradually changed from paper to electronic versions. According to these interviewees, the advantages of current practices were the ease and speed of email, and that video conferences had become more common and reduced the need to travel. The shared archive and collaboration software platform was considered convenient because of its folder structure, easy transfer of various documents to a single PDF document, and the option to work offline.

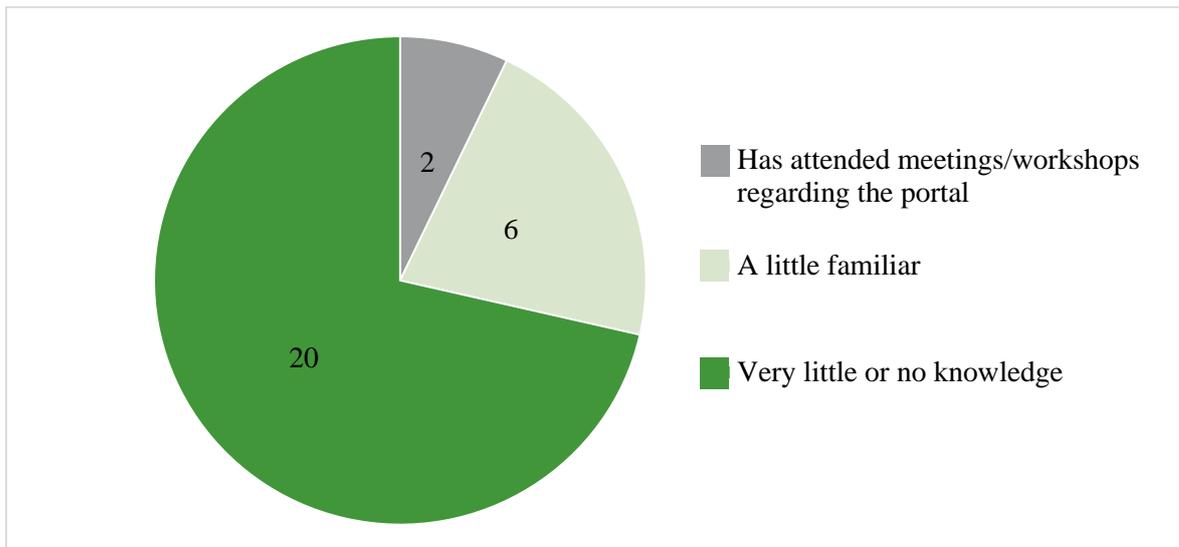
Some interviewees were dissatisfied with the incoherent ways of utilizing sales tools and archives within sales departments or sales teams. Interviewees hoped for common practices for managing information, documents, and archives. Considering archives, they proposed utilizing one archive to facilitate the locating of material and automatically saving it. Many interviewees wanted improvements in information security and document tracking, clearer instructions for sharing material, and the assurance that the company and the customer had the same document version. Other ways of improving communication and material delivery were to utilize video conferences more often, having better mobile phones, and having more trainings for new sales tools. Table 3 summarizes the most satisfying aspects and development propositions of current communication and material delivery practices.

**Table 3.** The most satisfying aspects and development propositions of current communication and material delivery practices

<b>Satisfaction with current practices</b>	<b>Development propositions for current practices</b>
Electronic delivery of material	Common practices for all salespeople
Ease and speed of email	One archive to easily find required material
Video conferences reducing the need to travel	Automatic archive for customer conversations
Folder structure of archives	Improved document tracking
Easy to transfer documents in one PDF document in the current collaborative client-server software platform	Improved reliability that both parties have the correct document versions
Possibility of offline work in the current software platform	Improved information security
	Clearer instructions on how to share material
	More video conferences
	Better telephones
	More trainings for new tools

Interviewees believed customers had been generally satisfied with current sales practices. Occasionally, customers requested documents in a different form, which complicated conventional practices. Some interviewees assumed that customers were dissatisfied with the incoherence of different departments.

Twenty of 28 interviewees knew nothing or very little about the customer portal. Six had seen it or its presentation material, and two had participated in a workshop or meeting about it, but neither was familiar with its current situation. Figure 9 summarizes interviewees' knowledge of the portal before the interview.



**Figure 9.** Knowledge of the portal before the interview

Most interviewees viewed the customer portal as a positive development, and many stated that they believed digital services and communication through one platform was the future the business was gradually aiming to achieve. Industrial Internet and e-store for purchasing spare and ware parts were the most interesting modules for interviewees. Finding contact information and the automatic saving of information and documents were also considered interesting and beneficial. A chat and contacting customers through the portal were interesting for many and uninteresting for others. Some participants were quite negative about the portal's development and saw no need for it. Some P&E interviewees were concerned that the portal's development would be aimed only at the paper and board customer. According to interviewees, the portal might help the company differentiate itself from its competitors and demonstrate the collaboration between the company and its customers, thus creating trust.

Many interviewees were concerned about having an additional digital tool that would require manual work without replacing an older tool. Administering the portal and its credentials, monitoring shared material, and answering questions asked in the portal were considered laborious and time-consuming. Many considered having credentials and logging in to the portal an inconvenience for the customer, but most were more concerned about whether the portal was secure enough to give access to certain material only to the correct people. Since

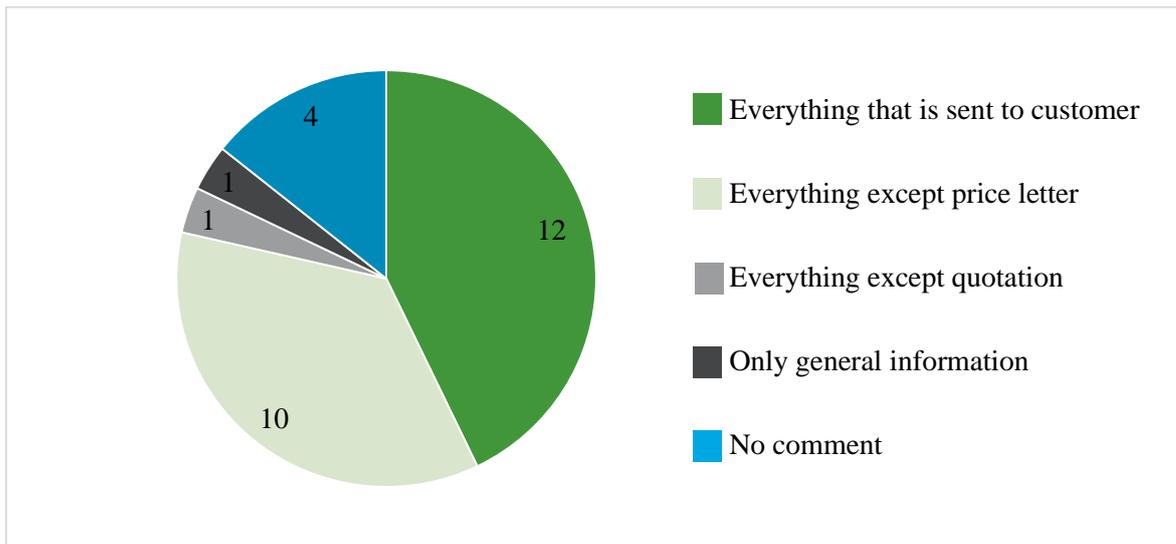
projects are often confidential within the customer company, the portal should not display any information outside the purchase team. Some interviewees wondered if customers would want to use a portal provided by a supplier, because customers had multiple suppliers. Interviewees were also concerned about users' lack of IT skills, because business was quite conservative and possibly resistant to change, especially at the beginning.

Interviewees were asked how they would utilize the portal in their work. Eight interviewees suggested using the portal to create a common schedule, e.g. for negotiations, to give both companies the same information about meetings. Many interviewees found the portal adequate for sending and receiving sales project material. Many said they appreciated that automatic saving of material was sent to and received from the customer. The option to upload personalized references, quotations, technical specifications, and marketing material in the portal interested interviewees. Interviewees also suggested that customers could send missing background information for a project via the portal. Three people suggested utilizing the portal for providing benchmark data to enable customers to compare their current and future performance with their competitors'. In addition, the possibility of calculating e.g. the payback period and a link to simulators were proposed as features for the upcoming sales module. Some wanted to use the portal as an information channel for seminars and other events. Some P&E interviewees recommended providing the portal exclusively to key customers. A summary of interviewees' interest in utilizing the customer portal's sales module is presented in Table 4.

**Table 4.** Summary of interviewees' interest in utilizing the customer portal's sales module

Interests in utilizing the customer portal in the sales phase	Common schedule
	Sending, receiving, and saving project material
	Personalized reference and marketing material
	Delivery of quotation and technical specifications
	Background information from customers
	Benchmark data
	Calculations for savings and payback period
	Informing about events

Interviewees' opinions were divided concerning what information and material should be available in the sales module. Twelve interviewees thought that everything sent to the customer should be available in the portal, including highly confidential information. Confidential information should have strong security measures to control the availability of information. Ten participants would share everything except the price letter via the portal. One person would not share the quotation; another would share only general information. They were concerned that the portal could have security issues that would lead to mistrust and issues with customers. The opinions have been visualized in Figure 10.



**Figure 10.** Opinions about the information that should be available in the sales module

Interviewees believed that many customers would be receptive to using the portal in their purchase phase. Interest arguably depended on the company's modernness, its information technology skills, and trust in digital tools. Business was quite conservative, and some companies wanted to work conventionally. There might be resistance to change in both companies.

Many interviewees emphasized a focus on ease of use, simplicity, personalization, user experience, high information security, and a customer-oriented approach in module development. These were perceived as the basis of portal development and vital to the customer's interest in using it. According to interviewees, all internal vocabulary and advertising slogans should be eliminated from the portal, because users were primarily engineers, who did not appreciate useless words. Customers should also have the right to choose the communication tools they wanted to use. Interviewees wanted the module to serve all departments within the company and unify the customer experience. Uploading material to the sales module should be effortless and automatized as much as possible, and the portal should be mobile-friendly. An offline mode was also desirable.

Because the sample was comprehensive and large compared to the target group, the results of internal interviews can be viewed as reliable and valid. Nevertheless, the sample cannot

be perceived as random because of the intention to cover different positions. This must be taken into account, since results might have differed with a completely random sample. However, the modification was intended, since a completely random sample would possibly have exaggerated some positions and excluded others. Covering more positions was considered more important than having a completely random sample.

#### **4.4 Customer view of communication and customer portal**

This subchapter presents the research on the customer perspective of communication and use of the Valmet Customer Portal. Like the internal research, the customer research was executed using qualitative methods. Data collection is presented following an analysis of the gathered data. although there is more internal data compared to external data, data from customers is considered more important, because the portal is designed to meet their needs.

The external interviews were targeted at Valmet Board and Paper Mills' customers. These customers are mostly papermaking companies and board producers. Valmet's customers for new board and paper machines are mainly located in China and the Asia-Pacific region. Europe and North America are the most important markets for board and paper machine rebuilds. (Valmet 2019b)

##### **4.4.1 Data collection**

Customer interviews were conducted as semi-structured interviews like the internal interviews. The target group was the Valmet PM business unit's customers, and a total of six customers participated in the interviews. Two interviews were face-to-face, two were executed via video conference calls, and one was a phone interview. One interviewee was located on another continent, and there was a need for a translator, so the participant was interviewed by a local Valmet employee.

The sample was based on participants' willingness: The discovering of customer interviewees relied on Valmet employees' customer networks and recommendations, as well

as participants' willingness to provide their time and effort to participate in a study conducted for a supplier. Participants were from companies of different sizes and various business areas. Concerning the variety of companies, the sample was comprehensive, although there were not many interviewees.

The question framework consisted of 18 questions. Interviewees were first asked to briefly introduce themselves and their background with Valmet. Next, they were asked to talk about the main communication and material sharing tools they had been using with Valmet. To address this question more explicitly, multiple options were given from which to choose. Participants answered questions regarding information and material provided by Valmet, as well as information security during receiving and sharing material from/to Valmet. They were asked about their satisfaction with communication with Valmet, and to specify what is good about it and what needs improvement. They were also asked to rate interaction with Valmet employees. Next, participants were asked about communication with their other suppliers and if they were satisfied with it. In addition, they were asked if they had used a digital portal provided by another supplier.

Next, interviewees were given a short presentation to make them more familiar with the Valmet Customer Portal so they could answer the following questions. After the introduction, participants were asked what they thought of the portal and its current features. Regarding the sales module (or purchase module from customers' perspective), they were asked about their interest in using the upcoming sales module. They were given a list of options to specify what they would be interested in using and what they would not find necessary. Next, interviewees were asked about how they would like to communicate and deliver material in future. These questions also had options from which to choose. Finally, the participants brought up extra comments if they had something to add to the interview. The question framework for customer interviews can be found in Appendix 3.

#### 4.4.2 Data analysis

All six participants were from different countries in Europe and Asia, and they worked in similar positions in their companies. Interviews lasted on average between 30 and 40 minutes. All participants had communicated actively with Valmet. Some customers had a long history with Valmet, and some were newer customers.

Customers said face-to-face meetings were the most important form of communication. In the 2010s, video conference meetings had become more popular, and they were used to complement face-to-face meetings, e.g. if all the participants were unable to attend a meeting in person. However, not all customers used video conferencing. The phone is used a lot, especially for urgent matters. Email is a day-to-day tool that is used especially for delivering material. Some customers said they preferred to make phone calls to sending messages by email.

Interviewees were generally quite satisfied with the ease of receiving information and the quantity of material they received. Most interviewees stated that the connection with the company was satisfactory. Some interviewees specified that receiving the necessary information and material required several conversations. In addition, interviewees said that information security was satisfactory for information sharing and material delivery between Valmet and their company. There had never been any issues with any of the interviewed customers.

Almost all participants were satisfied with communication between Valmet's salespeople and their company. Customers appreciated the response time, variety of options, and the employee's focus on the project. Communication with Valmet's management and communication speed received some criticism, as well as the willingness to discuss about more difficult issues and local sales teams in the customer's region. On a scale of 1 (poor) to 5 (excellent), the average score for satisfaction in interaction with Valmet salespeople was 4,5.

Customers were generally satisfied with their other suppliers, although there was a clear distinction between European and Asian customers. Asian customers were less satisfied with their other suppliers than Europeans. Customers used similar communication tools with other suppliers, but video conferencing was generally used less. None of the interviewees had used a digital customer portal provided by other suppliers.

Participants said the development process was positive progress. Customers stated that if the portal functioned flawlessly, it would be beneficial. It might also bring a new perspective to a conservative industry. Communication was considered very important, and the intention to further facilitate was respected. The concept of a supplier-provided portal was raised as a concern, because customers had multiple suppliers. Customers especially liked some of the modules.

Regarding the purposes of the future sales module, customers had different opinions. Figure 11 presents the interest in different purposes. All answers are represented in the figure. For some options, interviewees had no comment, and these are not shown. Dark green indicates that the customer would be interested in the feature, and light green that he/she was somewhat interested. Red indicates that the customer was not interested, and orange that they were not very interested.

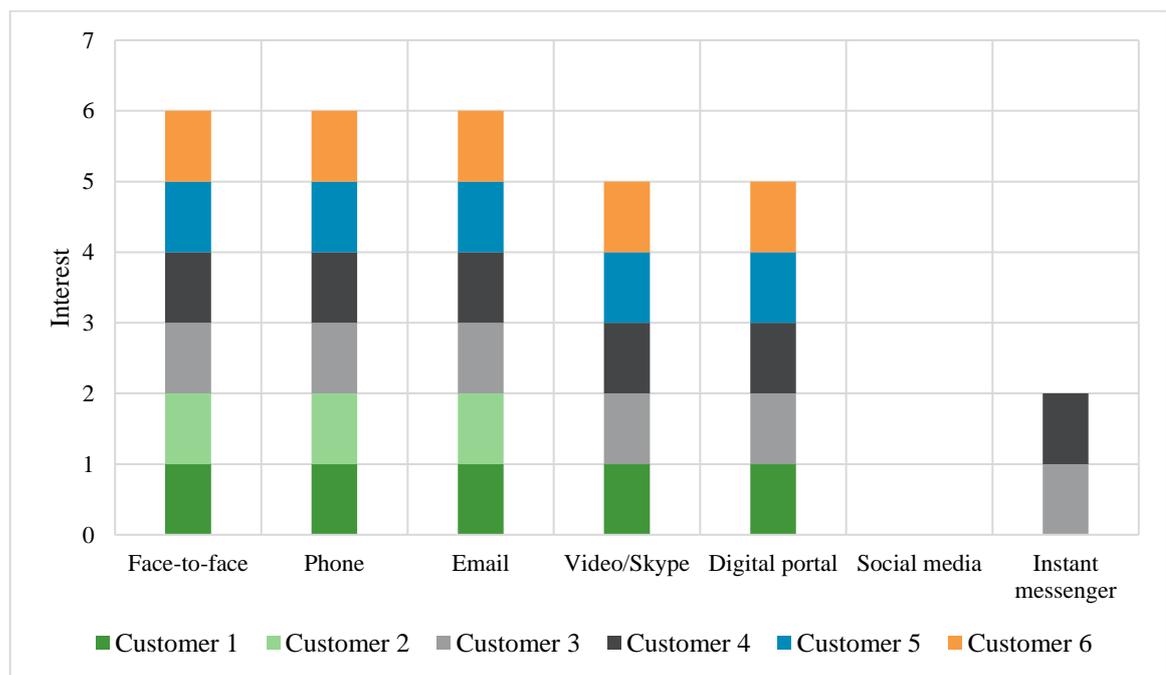


**Figure 11.** Interest in possible purposes of use

Customers were especially interested in obtaining benchmark data through the portal. They found it valuable to compare their performance with competitors. Finding contact information and receiving reference material were also interesting features for most participants, as were calculating savings and profitability. Interest in receiving a quotation was divided: Three participants were interested, and one of them particularly, but the other two were not interested or not very interested. One interviewee was interested in receiving technical specifications but had no opinion about receiving an entire quotation. Receiving stock exchange releases through the portal was found the least interesting feature of all the options. Receiving other material gained mostly positive responses. Other features, such as commenting on specifications and other material, communicating through chat, and sharing

and planning a common schedule, received favorable comments. Outside the provided list, customers were interested in receiving technical specifications through the portal, having a progress tool, and a common video conference system to facilitate conference calls, since companies often used different systems. Although there were negative responses to some of the listed features, customers found every option suitable for the portal, but not all of them were necessary or interesting.

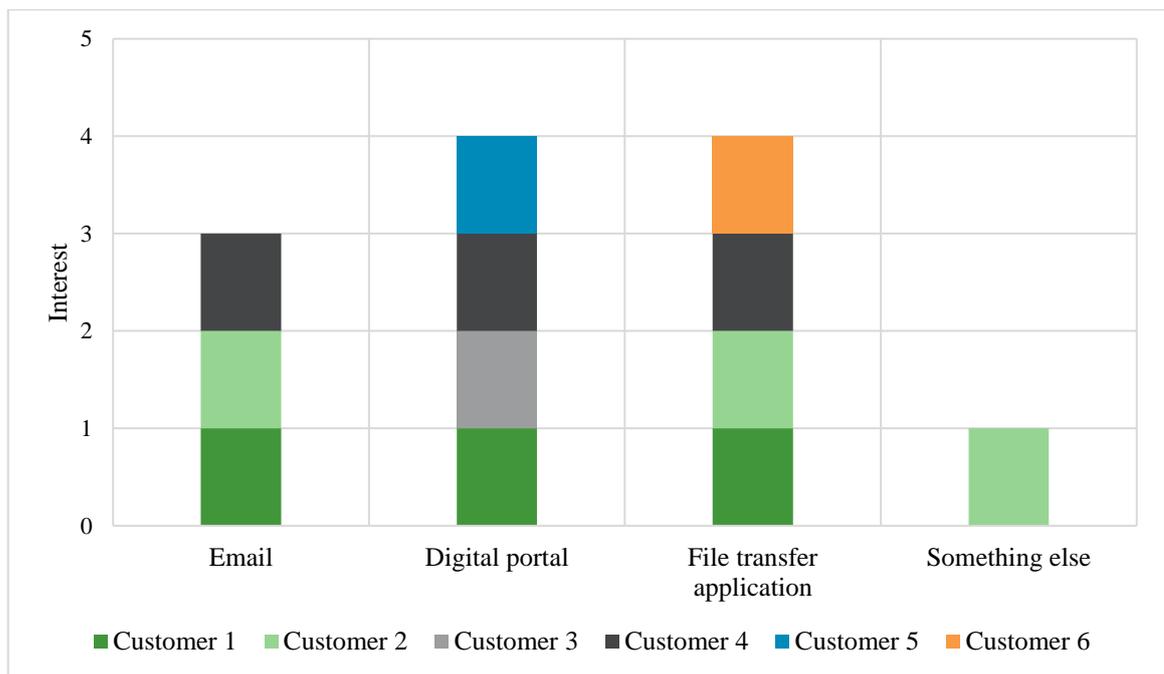
In future, customers would prefer to communicate face-to-face, by phone, email, video calls, and the digital portal. Social media was not seen as a good way to communicate, and in some companies it was not even allowed at the workplace. Some customers saw instant messaging as a good way to communicate for short and/or informal matters. Data concerning preferred communication tools is presented in Figure 12.



**Figure 12.** Preferred communication tools in future

Interviewees had different opinions about the future tools for material delivery. Two interviewees stated they could use the digital portal for material delivery exclusively and replace email and file transfer applications with the portal. Two interviewees had no specific preference and would use email, the digital portal, and/or a file transfer application. One

participant would use conventional material delivery methods to some extent in addition to an instant messenger. This participant would not use a digital portal because he/she was not very familiar with it. One customer would use only a file transfer application. In general, utilizing a digital portal and a file transfer application were found the most interesting tools for material delivery. Email was not as desired, although the differences between average preferences were small. Figure 13 presents data concerning preferred material delivery tools.



**Figure 13.** Preferred material delivery tools in future

The gathered data can be considered reliable and valid, because the interviewees were in similar positions and there was great diversity in companies of different sizes in six countries. The sample size was not large, but it was adequate because it was based on voluntariness. However, the sample was not random, although the Valmet salespeople tried to think of various people in different companies and continents. Finally, every targeted person agreed to be interviewed.

## **5 FINDINGS AND DISCUSSION**

This chapter first presents the main findings from the data analyses of the internal and external interviews and literature. Next, the reliability and validity of the results are evaluated. Finally, the implications and recommendations are presented, based on the results.

### **5.1 Findings**

In recent decades, the focus of economics has shifted from the producer's perspective to the consumer (Vargo and Lusch 2004), and interest in service and managing the customer experience has grown (Accenture 2015; Vargo, Lusch and Koskela-Huotari 2019). Reorientation from conventional approaches and manufacturing to service and S-D logic enables companies to understand their customers better and to become more customer-centric in their business (Bettencourt, Lusch and Vargo 2014). This can be achieved by providing a coherent customer experience through controlling customer experience elements (McGrath and MacMillan 2005; McColl-Kennedy et al. 2015), collaborating between different departments and with the customer, and pursuing an understanding of the value of the offer in the same way as the customer perceives it (Le Meunier-FitzHugh et al. 2011). Customer-centricity leads to generally satisfied customer experiences (Gibbons 2017), more trust, and more interactive and stronger customer relationships (Le-Meunier-FitzHugh et al. (2011). Valmet is seeking to move from being a goods-dominant business to a service-dominant business and is aiming to become the most customer-centric company in its market. Sales functions are a central interface with the customer and one of the functions most likely to accelerate a change of focus to service-centered thinking (Le Meunier-FitzHugh et al. 2011).

Service-centricity is inherently customer-oriented (Le Meunier-Fitz-Hugh et al. 2011), and the sales module as a service is customer-centric at its core. Proper implementation creates a channel for continuous collaboration and enhances company's customer-centricity and customer experiences through its features. The module would allow more efficient two-way communication at several levels and between all designated people. This would enable

Valmet to build stronger and more interactive relationships and create trust. Collaboration among internal departments helps to provide coherent experiences to customers and customize the offer in accordance with customer needs. The module would also collect information about customers through its features and facilitate gaining an understanding of their needs and the value of the offer as they perceive it. It would also enable more coherent and positive customer experiences by maintaining the same standards during the entire sales project. Utilization of the module would obligate Valmet sales departments to use similar methods to forward the sales process and therefore unify the procedures used at Valmet sales.

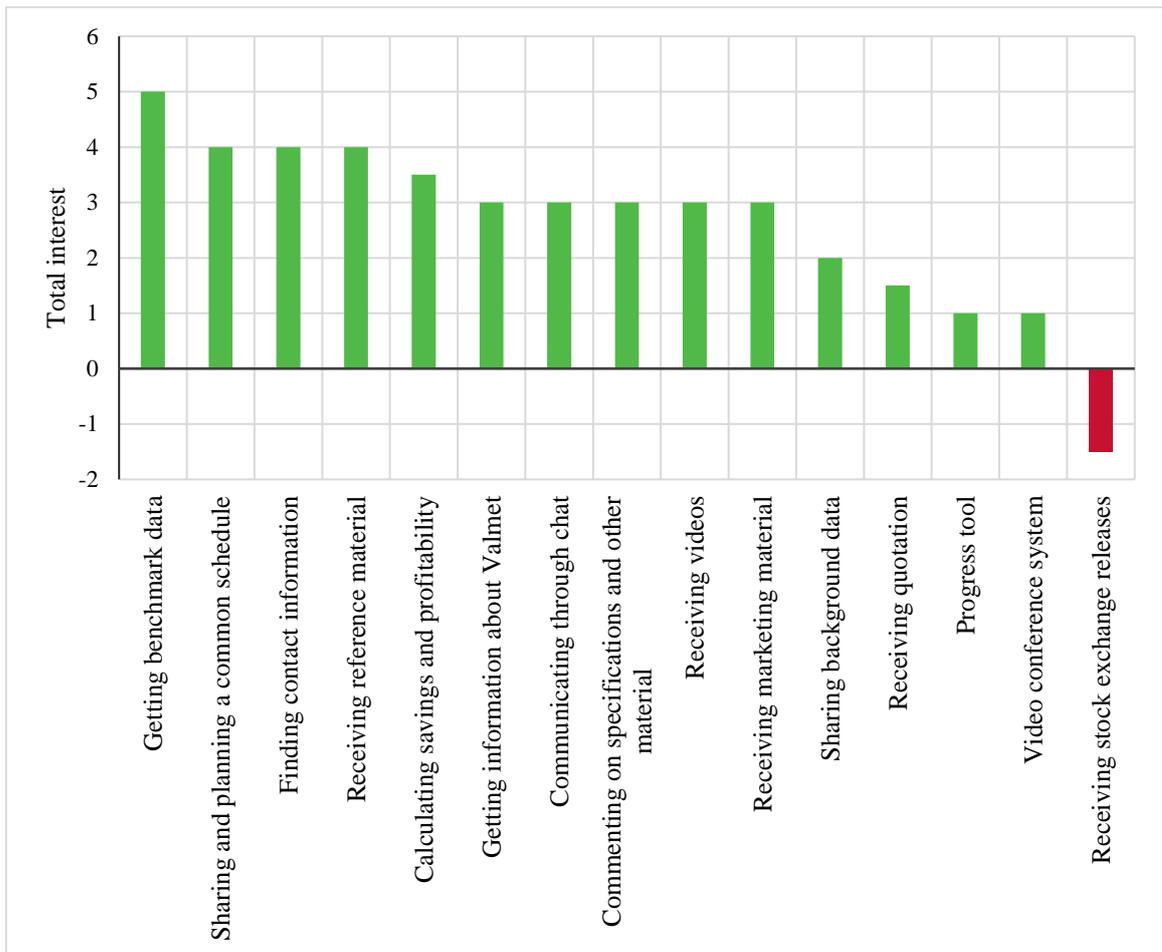
Currently, communication between Valmet sales and the customer goes through a key contact, who is often the sales manager. Valmet salespeople utilize email, phone calls, face-to-face meetings, and video conference calls to communicate and collaborate with customers. Their use depends on the customer, but face-to-face meetings are considered the most important form of contact. Video conferencing has become more common and popular in the 2010s, but not all customers have used them with Valmet. Sales material is primarily shared through email, although with some customers, salespeople have used file transfer applications and more rarely customers' online portals. Many salespeople would like an easier and more automatic archive for all the information and material shared within a sales project. Currently, some communication is not saved in common archives, and employees in back office positions especially therefore experience inconvenience in the acquisition of the required information.

Customers were generally quite satisfied with communication and material sharing. Some were satisfied with the speed and focus of salespeople, and were pleased with the connection between the companies. In contrast, some customers found receiving the right material ineffective and slow, and communication with the management and local Valmet organizations difficult. They also wished to contact the required person directly instead of having only one contact, although salespeople found the system of having one key contact easy and clear. Overall, the interviewed salespeople knew little about their information security in receiving and sending material, and more than half were in the categories from a little concerned to highly concerned about the security of email. The rest were satisfied, and

some interviewees stated that there were excessive security measures in external communication. These customers had never encountered issues with information security.

To become more service-focused and customer-oriented, and to unify its procedures, Valmet has developed a customer portal for day-to-day collaboration with customers. Because the customer portal's development thus far has been for the Valmet service business line and it is quite a new tool, it was poorly known by the PM salespeople and the interviewed customers. In spite of the lack of earlier knowledge, the portal was viewed as a very positive development, especially by the interviewed customers, and most would like to utilize it in future. It is seen as a possible substitute for email and file transfer applications in material sharing that will unify the customer experience. In general, Valmet salespeople were somewhat more reserved about the overall project than customers, but most found it positive and desirable.

Salespeople agreed that the sales module should be developed in accordance with customer requirements and interests, but in a manner that did not complicate or increase the daily work in the sales departments. Regarding the future features of the sales module, customers were positive about most of the provided feature options. The data is presented in Figure 14, which presents customers' total interest in potential sales module features, from most interested to least.



**Figure 14.** Customers' total interest in potential sales module features

Customers were especially interested in obtaining benchmark data from the portal, because the data would be valuable for their overall business and for making decisions on improving the performance of their machines and equipment. This might lead to more co-created value with Valmet in the form of upgrades and rebuilds. In addition, finding contact information was highly interesting for the customer. Salespeople also found it valuable, but they were concerned that showing the contact information of many contacts might not be in line with directing conversations and overall communication through one key contact. However, customers hoped to have more contact people, because they would prefer to make contact directly with the right person. In addition to sharing and planning, a common schedule and calculating savings and profitability were among the most interesting features according to customers.

Opinions about sharing documents and other material were partly divided among both customers and salespeople. Reference material was the material both customers and salespeople generally preferred. Sharing quotations through the portal received very positive, neutral, and negative comments. Some thought it would be the most important feature of the sales module, but some found it unnecessary. One customer wanted to receive technical specifications instead of the whole quotation. According to customers, sharing stock exchange releases was the least interesting feature of all the provided options. Sharing marketing material, videos, and information about Valmet were popular features among both customers and salespeople, but salespeople disapproved of an excessive amount of “nice-to-know” information.

Customers commented positively on communicating through chat and commenting on specifications and other material. Salespeople were a little doubtful about the chat, but many liked the idea of sharing and planning a common schedule with customers. Many salespeople, especially those working with the technical aspects of a sales project, found the possibility to comment on specifications valuable. Some salespeople were interested in using the sales module as an event tool for sales events. Outside the provided options, customers were interested in a progress tool and a common video conference system to prevent issues arising when starting a video conference call with the current tools.

Regarding the characteristics of the upcoming sales module, the interviewed salespeople considered ease of use and simplicity the most important characteristics. The portal should be easy to use and navigate, and it should not contain any internal vocabulary and advertising slogans, because users either do not understand or appreciate them. The interface should be simple, and using the portal should require minimum learning. According to McGrath and MacMillan (2005), too many options, features, and functionalities lead to dissatisfaction and reluctance to use digital service. Language used should be understandable for every customer with no internal slang (Filenius 2015), and navigating through hyperlinks and menus should be made effortless to enable fast and easy searches for the desired information (Yang, Jun and Peterson 2004; Filenius 2015).

According to the interviewed salespeople the sales module should be personalized for each customer and role. Not every portal user is interested in all the features, so filtration is required. In addition, the portal should not be too general to avoid customers losing interest. In general, customers want service providers to personalize the experience in accordance with customer needs (Gibbons 2017). Salespeople also emphasized the importance of customer support in the portal. The portal should have real-time instructions and guidance on how to use it to enable the user to find or do what they want and need. Generally, if customers are unable to find something they need, they search for customer support and guidance, and if it is unavailable, they may abandon the digital service (McLean 2017).

Security is extremely important in communication between the supplier and customer. Many documents and much information are highly confidential, e.g. proposals, pricing letters, guarantees, and contracts. According to Yang, Jun and Peterson (2004), companies are generally concerned about the information security of digital services. Service providers must therefore be especially responsible with security and privacy measures, and state them clearly in the service.

Both salespeople and customers emphasized the importance of availability. Mobile use was especially perceived as a requirement, since mobile devices have become an increasingly common work tool. According to Statista (2019b), more than half of global website traffic is generated through mobile devices. However, the digital service should be designed taking poor Internet connection and a lack of Internet connection into account, because the quality of data connections depends on certain factors, such as area, operator, and number of users (Filenius 2015). This is highlighted by sales managers and paper technology managers who travel a lot, because large factories supplied by Valmet are often located in sparsely populated areas far away from cities.

According to the literature, customers feel frustrated if a digital service misbehaves or includes excessive components such as graphics and advertisements (Yang, Jun and Peterson 2004). The service must be kept at a reasonable download speed (Yang, Jun and Peterson 2004), since customers get frustrated after a few seconds of rendering a page (Everts 2013).

The key surface characteristics must be formal and orderly to enhance website credibility, and all information on the service must be of high quality, correct, impeccable, and current (McLean 2017). If these aspects are considered, customer satisfaction increases (Yang, Jun and Peterson 2004; Everts 2013; McLean 2017).

## **5.2 Reliability and validity**

The results can be regarded as reliable and valid, although the research had some limitations. The sample of internal interviews was large and included various positions, so the gathered data can be seen as very reliable in terms of sample size. The data gathered from customer interviews can be regarded as quite reliable, because customers from various companies in different countries were contacted, and all the contacted people agreed to be interviewed. However, the sample was not as large as for the internal interviews. In addition, the overall results are likely to be more reliable, since the main interviewer was not an employee who had worked in the company for a long time and thus had no dependencies or bias. Cultural differences and different language skill levels may have affected the results from customers, because there may have been misunderstandings (Saunders, Lewis and Thornhill 2016). In addition, the choice of semi-structured interviews signifies that the interviews were not identical, which might lead to differences in answers but also provide more honest and varied responses (Saunders, Lewis and Thornhill 2016).

The results are not universal but generated for a specific project and applicable to the portal's development. Some of the results can be generalized into various businesses, especially similar B2B businesses, but some are strictly company-specific. The lack of feedback after implementation is a major limitation, because there is no evidence or feedback concerning how the sales module was received and perceived.

To gain more reliable and valid results, more customers could be included in the interviews from different positions and companies. In addition, customers in other business lines such as P&E could be interviewed to acquire more general and more business line-specific information.

### 5.3 Recommendations and future implications

The results identified a high potential for the sales module and various features for it. The module could enhance customer-centricity and experiences through these features by enabling more efficient two-way communication, unifying the procedures used at Valmet capital sales, obtaining more information about customer needs and building stronger relationships. Use of the sales module should always be agreed with the customer and never required.

Benchmark data emerged as the most interesting feature for customers, and because of its popularity it should be one of the first features to be developed for the sales module. Anonymous performance information could be released with the permission of customers and entered in a graph where portal users could review their performance ranking against their competitors. To review the results, customers should agree to submit their own information.

Customers especially wanted sales contact information to be given in the portal to enable them to find the right specialist more quickly and easily without contacting several people. Virtual contact cards already exist in the portal, but the feature is currently aimed at the mill team. Since Valmet sales prefer to have one contact person between sales specialists and customers, only few main contacts can be displayed. This would satisfy customers, but not all the sales contacts would be available for everyone.

The interest of customers and salespeople indicates that the sales module should have an integrated material sharing tool to deliver documents and sales material between the company and customers. Although not all customers were interested in receiving quotations through the portal, some saw it as the most important desired feature that they had wished for in advance. Customers were not interested in receiving stock exchange releases through the portal. They therefore should not be put on the portal. The tool should deliver material more securely and precisely, and automatically save downloaded documents in the portal with revisions. Currently, archives are internal, and documents must be uploaded from personal archives, computer hard drives, or email boxes. With the portal, material can be re-

examined later, e.g. for a future project, and shared material can be viewed by the users of both companies within certain limitations. It is recommended that the quotation and more confidential documents have a separate area to distinguish them from all other documents. Strict user roles in the portal must specify the documents the user is allowed to view, since the confidentiality of documents varies. All documents must have a clear and easy categorizing system to prevent them getting lost. In addition, they should be named accurately, correctly, and similarly. Downloading and uploading material must be easy and fast if users are to be satisfied.

In addition, the portal should allow commenting on and editing material such as technical specifications. First, the documents could be uploaded as PDF documents, and the portal should allow notetaking and highlighting. Later, the documents could be integrated into the portal as digital versions, which would allow editing for salespeople. This would especially ease the work of application engineers, since the comments on modifications would be in the same document as the official draft.

Calculating savings and profitability could be accomplished by integrating a simple computation program to calculate e.g. payback period, savings, and performance. The customer could enter their data into the computational system, which would calculate the desired data. Currently, data is calculated and shown to the customer in its own separate tool. All the calculations exist, so the program needs to be developed in the portal. The program could present data in numbers and graphs for visualization, and compare data to desired data. The tool could also have links to existing simulators where the customer could view the operation of their equipment.

A common schedule exists in the portal in the form of a shared roadmap that gathers all the Valmet participant events and actions at the mill into a common time schedule. A similar execution could be followed in the sales-purchase schedule. The sales-purchase schedule should contain arranged meetings, negotiations, and deadlines, and it should be created together with the customer. Special attention should be paid to the schedule not becoming an internal schedule, since the portal is targeted at the customer. The visualization of the

schedule could be linear, since the sales process proceeds forward and its actions are non-recurring. In addition, a progress tool could be created to follow the progress of the sales process. The tool could show the process status of the project and be visualized in a linear manner like the sales-purchase schedule.

A chat option already exists in the portal, but it could also be utilized in the sales module. Its use must be agreed with customers so salespeople are able to respond more quickly. The chat saves the conversations in the portal and can also be utilized for customer support. Later, a common video conference system could be integrated into the portal. It would facilitate video conference calls, since customers' internal systems do not always correspond with the one Valmet uses.

Some salespeople would like to use the portal to notify customers about events and send invitations. The sales module could be used to inform customers about sales-related events, invitations, and sharing material about the events. The tool would require an option to send information for certain roles in different companies to make it efficient. The achievability of more widespread information needs to be further examined.

The implementation of the features should be initiated gradually, and the development should not be rushed. The implementation of the most important features should be started first to engage customers in using the portal during the sales phase. These features are benchmark data, sales contact information, calculating savings and profitability, a common schedule, and sharing sales material, especially targeted references and proposals. Although sharing proposals was not the most rated feature, some customers greatly emphasized it. It was thus included with the most highly rated features. Tools for benchmark data and calculations must be developed from the very beginning, but for the rest of the prioritized features, the portal's existing features could be utilized and tailored for use of sales. Table 5 summarizes the recommendations for potential sales module features.

**Table 5.** Recommendations for sales module features

<b>Desired features</b>	<b>Recommendations for the implementation of features</b>
Benchmark data (prioritized)	Releasing anonymous performance information with the permission of customers. Customer able to see their placement in the ranking when they enter their information.
Sales contact information (prioritized)	Displaying main contact information of the sales project with video conference links.
Calculating savings and profitability (prioritized)	Creating a simple calculation program for payback period, savings, etc. Customers can enter their background data. Links to equipment simulators can be added to the tool.
Common schedule (prioritized)	Creating a linear schedule of agreed negotiations, meetings and deadlines. The schedule would be adjusted in consultation with the customer.
Sharing quotation (prioritized)	Creating a material sharing tool for quotation with easy download and upload system and automatic saving. High limitations for confidential information.
Sharing reference material, background information, marketing material, videos and information about the company (references prioritized)	Creating a material sharing tool for the documents with automatic saving. Must have precise categories to prevent information loss. Possibility to upload and download documents for both parties.
Commenting on technical specifications and other material	Starting with a PDF commenting tool. Later creating a tool for digital documents integrated into the portal that allows editing for salespeople.
Progress tool	Creating a tool for showing the progress of the sales project.
Chat	Including the existing portal chat.
Video conference system	Including an internal video conference system.
Event tool	Creating a feature that would notify customers about Valmet events.

To optimally develop the sales module, it should include users' desired characteristics. The literature correlated with interviewees' answers and comments. The most important characteristics were the following: ease of use and simplicity, personalization, customer support, security, availability, speed and smoothness, website credibility, and information quality.

According to interviewees, the most important characteristics were ease of use and simplicity. This can be accomplished by developing simple features so anyone can use them with a little learning. All complexity must be eliminated, and the interface must look simple. Language must be universal and simple so every user can understand the meanings of every text. Unnecessary advertisements and slogans should be eliminated to prevent any frustration in users. In addition, navigation should be facilitated by placing, sequencing, and naming buttons and hyperlinks in accordance with user intuition. Navigation buttons should be easy to find, use little space, and preferably be hidden under a menu that expands when clicked on to give users navigation options. Space should be reserved for the contemporary page and its functions, but the navigation buttons and hyperlinks should be easily available. Helpful texts, tips, walkthroughs, and user guides must be easily accessible in the sales module to enable convenient use of the module. The portal is currently in English, but it is recommended that there are other language options to allow use by those whose English is not fluent or who wish to work in another language. This should be done when use of the portal has increased to a satisfactory level. To investigate users' ability to use the digital service, the service should be tested with all kinds of potential user with different IT skills who have yet to use the portal.

To personalize the sales module according to user needs, users must be divided into specific roles. Roles must be clear to allow or prevent certain users accessing specific functions or information. The uploaded material should be targeted at the specific sales project. The marketing material should be targeted at the products and services that interest the customer. This can be accomplished by uploading customer-specific information and material such as existing machines, their attributes, and structures in the portal and automatically retrieving e.g. reference, instruction, and marketing material from common sales information banks.

Marketing automation would reduce the manual workload. To personalize the portal, there should be an option to adapt it according to personal preferences and needs. However, this option should be made as easy as possible to prevent confusion in users, and it should therefore not be prioritized yet.

It is important to reduce information security threats to a minimum. Some information is highly confidential, and loss of information presents a serious risk to business. The portal itself has high security measures, but the different user roles should also be impeccably reliable to prevent confidential information getting to the wrong person. Quotations are an example of such information. In addition, no information about sales projects should be visible to a customer's users working outside investments or purchase, because projects are often highly confidential and publicly revealed later.

The sales module should be made available for all, regardless of place and device. The portal should enable pleasant use for different kinds of resolution and screen size, especially for mobile devices. A mobile application would be suitable in addition to the website version of the portal, since the portal would be with the user everywhere, and logging into the portal to read messages would be more convenient. This would also enable offline use, since content would be downloaded in the device and the application would update it whenever an Internet connection was available for online use. The application could also notify the user about new events regarding the user. A similar application could be designed for computer users if a need is identified. However, this would potentially lead to skepticism among users concerning the customer, since it is a supplier-made application. This therefore requires further study.

For customer support, the user should be able to contact Valmet personnel for assistance with portal use. Chat can be utilized to allow customers to contact assistance staff when needed. Contact information for customer service outside the portal, e.g. phone numbers, must be available and clearly visible for the user to notice. The portal could also include a "frequently asked questions" page for users to quickly find information about common problems. Assisting texts, tips, walkthroughs, and user guides should be available in the

portal to reduce the need for personal assistance in its use, especially when the user has recently started to use it.

Key surface characteristics should be formal and ordered for the website to look credible. Information must be verified: It should be of high quality, up to date, and correct. Large images and objects must be limited for the service to function properly with slower Internet connections to enable fast and smooth use of the website. Recommendations for implementing desired characteristics are summarized in Table 6.

**Table 6.** Recommendations for implementing desired characteristics

<b>Desired characteristics</b>	<b>Recommendations for their implementation</b>
Ease of use and simplicity	Developing simple features customers need and eliminating others
	Eliminating unnecessary advertisements and using simple and ordinary language
	Placing, naming, and sequencing navigation buttons and hyperlinks in accordance with user intuition
	Reducing space for unnecessary elements
	Assisting guidance in use of the portal
	Later including other language versions in addition to English
	Testing users' ability to use the portal
Personalization	Uploading targeted material for a specific sales project
	Clarifying roles and what parts of the module the roles would be able to view
	Possibility of adapting the portal according to personal preferences
Security	High security measures
	Precise user roles
Availability	Possibility of an offline mode
	Improving mobile use

**Table 6.** Recommendations for implementing desired characteristics (*continued from previous page*)

<b>Desired characteristics</b>	<b>Recommendations for their implementation</b>
Customer support	Utilizing the existing portal chat to contact assistance staff
	Displaying contact information for contacts outside portal
	Frequently asked questions page, guides, and walkthroughs
Speed and smoothness	Limiting large elements that slow the portal
Website credibility and information quality	Formal and orderly key surface characteristics
	High-quality, correct, impeccable, and current information

In general, it is recommended that employees receive more information and instructions about new tools, material sharing, and information security at Valmet. The interviewed salespeople knew little about the new tools that had been recently introduced or developed, and many stated that they would like to learn more about tools, ways of delivering material, and the information security that affects their work. The portal therefore also needs more promotion among Valmet employees so they can introduce it to the customer. It is recommended that a test portal for introducing future users to the portal is established to allow customers and internal users to test the portal's functions and features before moving to the actual version.

The most important aspect is that the sales module is developed for customers and to co-create value with them in accordance with their needs. Feedback needs to be collected from customers at all times. The sales module will enable Valmet to become more customer-centric in sales-purchase projects, but there is always a possibility that this will be forgotten, and the portal is developed in accordance with internal requirements. As the study by Filenius (2015) suggests, project implementation should be planned carefully, kept flexible, and proceed one step at a time. Developers should be in various positions within the company, and customers must be included in development (Filenius 2015). The customer should therefore be invited to test the portal everytime it is being developed to provide valuable feedback and steer the development in the right direction.

The project's greatest challenge is likely to be resistance to change. People may find it difficult to change their habits and move to a different way of working, because they are accustomed to functioning in a particular way. In addition, a lack of commitment, a small budget, and a lack of developers and maintenance may lead to an unsatisfactory implementation of the sales module. Furthermore, lack of internal marketing may lead to the low conspicuousness of the module within the company, which will further lead to low conspicuousness for customers, a generally low utilization rate, and wasted resources. Careful planning is required for implementation, promotion, and further development.

Some of the research can be universalized. Similar B2B businesses can learn from this thesis how to create successful digital customer experiences by utilizing a digital portal, the kind of features customers prefer, and the characteristics that are important to remember in developing a digital service. However, more general research is required to identify a more universal model for a customer portal during a B2B sales project, because this thesis has been conducted for a specific business. In addition to other businesses, further research can be targeted at creating digital services for a company's other departments such as project implementation, because the customer experience must remain coherent at all the customer's touchpoints.

## 6 CONCLUSIONS

Interest in service, customer-centricity, and customer experience has grown in recent decades (Teixeira et al. 2012; Accenture 2015; Vargo, Lusch and Koskela-Huotari 2019). However, customer-centricity is still highly company-centric in practice (Bettencourt, Lusch and Vargo 2014), and B2B companies have not become proficient in meeting customer needs or creating successful customer experiences (Gibbons 2017). Specifically, use of digital solutions has not been fully utilized (Dubois and Clementino 2017). Furthermore, there has been a lack of research on customer experience and digital customer experience in B2B: The focus has mainly been on the B2C and offline context (McLean 2017; Zolkiewski et al. 2017). This thesis has focused on these aspects and sought to bring more perspective for utilizing digital services during B2B sales projects.

The purpose of this thesis was to develop a sales module for the Valmet Customer Portal to facilitate collaboration between the sales department and customers, enhance customer-centricity, and create successful digital customer experiences. Valmet has pursued a shift from a product-centric to a service-centric approach by providing integrated solutions for its customers, becoming more customer-centric, and enhancing customer experiences (Valmet 2019a). The new approach qualifies as an implementation of a service-dominant logic, which focuses on intangible resources, co-creation of value, and relationships (Vargo and Lusch 2004), and it is inherently customer-centric and relational (Le Meunier-FitzHugh et al. 2011). Sales functions are one of the primary interfaces with the purchaser. Sales activities are thus likely to be affected by a change of focus to S-D logic in managing customer experience, identifying customer needs, creating new offers, altering current offers in accordance with customer feedback, and building trust and more interactive relationships with customers (Le Meunier-FitzHugh et al. 2011). This thesis was conducted to answer the following research questions:

1. How would a customer portal enhance customer-centricity and establish successful customer experiences during a sales project?

2. What kind of features and characteristics in the customer portal would benefit the customer during a sales project?

The research found solutions for the first research question in the literature and interviews. The customer portal itself has been developed to enhance customer-centricity and customer experiences, and since sales and marketing are the primary interfaces with the customer (Le Meunier-FitzHugh et al. 2011), the sales module will have a strong effect on the enhancement of these aspects. According to the literature, customer-centricity and customer experiences can be established by strong and active collaboration between the company's internal departments and customers, understanding the customer's needs and perspective, providing a coherent customer experience, and building trust and stronger customer relationships (McGrath and MacMillan 2005; Le Meunier-FitzHugh et al. 2011; Parniangtong 2017). The interviews' findings indicate that the portal would facilitate collaboration between the supplier and customer by allowing more active interaction with customers at several levels and between all designated people. Designated people would be inherently included in material delivery and information sharing, and could read previous conversations on the portal, eliminating the possibility of the sender forgetting some of the intended receivers. The module would also enable more learning about the customer, by providing information about their problems and needs through utilizing its features. The sales module would strengthen the coherence of the customer experience, because the standards in each phase of the project would be more consistent, and all the departments at Valmet would use similar methods to forward the sales process. The facilitation of communication and development of the features and characteristics the customers prefer and find value of would help to build strong relationships and trust between the parties and satisfy customers.

The most important aspect of the development is to remember that the sales module is designed for customers and in accordance with their needs. Customers must be included in development as testers, and their feedback should always be gathered later to guide development in the right direction (Filenius 2015). A promising result of the thesis is that customers expressed the desire to utilize the portal during a sales project.

The research finds clear answers to the second research question. The results of the interviews revealed that customers and salespeople were interested in multiple features, the most essential of which were prioritized by popularity and importance. The prioritized features were receiving benchmark data, displaying sales contact information, calculating savings and profitability, sharing a common schedule, and sharing reference material and quotations. Implementation of the sales module should start with these features, and the remaining features should be established later.

Regarding the module's characteristics, a digital service developer should focus on ease of use and simplicity, personalization, security, availability, customer support, speed and smoothness of use, website credibility, and information quality. Similar results were identified in the literature and the interviews. It is recommended that all the identified characteristics be considered in development and optimized to deliver a successful customer experience.

The objectives of the thesis were achieved quite successfully. Results were discussed and research questions were answered. The research is case-specific, and not all the results and recommendations of the thesis can be generalized for all businesses and companies. This leaves an opportunity for further research on more universal models for enhancing customer-centricity and customer experience with a customer portal during a sales project.

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## APPENDICES

### Appendix 1. Internal interview framework – original in Finnish

1. Mikä on työnkuvasi ja roolisi asiakasrajapinnassa?
2. Miten kommunikoit asiakkaan kanssa?
  - a. Kuinka paljon ja missä vaiheessa myyntiprojektia?
  - b. Mistä asioista?
  - c. Mitä kommunikaatiovälineitä käytät?
3. Onko kommunikointi systemaattista? Onko kommunikaatiotavoissa eri asiakkaiden kanssa eri käytäntöjä?
4. Onko kommunikointi asiakkaan kanssa tehokasta? Onko myyntiprojektiin tarvittavat tiedot helposti saatavilla asiakkaalta?
5. Tallennatko sähköpostikeskustelut, palaverien muistiinpanot yms. aina arkistoihin?
6. Saavatko asiakkaat helposti kiinni tarvitsemansa henkilön Valmetin myynnistä?
7. Millaisia dokumentteja toimitetaan asiakkaalle?
8. Miten toimitatte dokumentteja asiakkaalle, ja miten asiakas toimittaa niitä teille?
9. Miten referenssit ja projektiin liittyvä tuote esitellään asiakkaalle? Saavatko asiakkaat tarkastella referenssi- ja esittelymateriaaleja myöhemmin?
10. Onko selkeää ohjeistusta, miten materiaalia tulisi jakaa asiakkaalle?
11. Millaiseksi koet tietoturvan myyntiprojektin kommunikaatiossa ja dokumenttien käsittelyssä?

(continues)

(Appendix 1 continues)

12. Oletko tyytyväinen nykyiseen kommunikointi- ja materiaalin jakelutapoihin? Mitä hyvää ja mitä kehitettävää nykyisessä prosessissa on?
13. Koetko, että asiakas on tyytyväinen nykyiseen kommunikointi- ja materiaalin jakelutapoihin?  
→ Portaalin esittely
14. Mitä ajattelet portaalista, ja miten haluaisit hyödyntää sitä myynnissä?
15. Miten ajattelet asiakkaiden näkevän portaalin?
16. Mitä tietoja portaalissa saisi ja ei saisi jakaa portaalissa?
17. Mihin portaalin kehityksessä pitäisi erityisesti kiinnittää huomiota? Mitä ei saisi missään nimessä tehdä?

## Appendix 2. Internal interview framework – English translation

1. What are your job duties and your role at the customer interface?
2. How do you communicate with the customer?
  - a. How much, and in what phase of the sales project?
  - b. About what subjects?
  - c. Which communication tools do you use?
3. Is communication systematic? Are there differences in practices with different customers?
4. Is communication with the customer efficient? Is the required information for a sales project easily available for the customer?
5. Do you always save email conversations, meeting memoranda etc. to archives?
6. Is it easy for customers to contact the appropriate Valmet salesperson?
7. What kind of documents are delivered to the customer?
8. How do you deliver documents to the customer, and how does the customer deliver them to you?
9. How are the references and product presented to the customer? Can customers review the reference and presentation material afterwards?
10. Are there clear instructions for how material should be delivered to the customer?
11. How do you feel about the information security of communication and delivery of material during a sales project?

(continues)

(Appendix 2 continues)

12. Are you happy with the present communication and delivery of material? What is good about the current process, and what needs to be developed?

13. Do you feel that the customer is happy with current communication and delivery of material?

➔ Presentation of the portal

14. What do you think about the portal, and how would you like to utilize it during sales projects?

15. How do you think the customer would find the portal?

16. What information should and should not be distributed through the portal?

17. What especially should be considered in the development of the portal? What should definitely not be done?

### Appendix 3. Customer interview framework

1. Short introduction and background with Valmet
2. How actively have you been communicating with Valmet?
3. What are your main communication and material sharing tools with Valmet?
  - a. Face-to-face
  - b. Phone
  - c. Email
  - d. Video/Skype
  - e. Digital portal
  - f. Something else – what?
4. Do you easily get required information from Valmet when you are making a purchase decision?
5. Do you get enough material from Valmet when you are making a purchase decision?
6. How do you feel about information security when sending and receiving material to/from Valmet?
7. Have you been satisfied with communication with Valmet? What is good about it, and is there anything you would like us to improve?
8. How would you rate interaction with our employees (1-5)?
9. How do you communicate with other suppliers?
10. Have you used a digital portal provided by other suppliers? How did you like it?
11. Have you been satisfied with communication with other suppliers?

(continues)

(Appendix 3 continues)

12. What do you think about the portal? What do you like and dislike?
13. What features would you like to use? What would you not use?
14. Would you be interested in using the portal for communication, material delivery, and/or other purposes during purchasing from Valmet?
15. What would you like to use Valmet Customer Portal's buying module for?
  - a. Receiving and/or sharing
    - i. quotations
    - ii. starting/background data
    - iii. reference material
    - iv. marketing material for the product
    - v. videos
    - vi. stock exchange releases
    - vii. something else – what?
  - b. Commenting on specifications and other material
  - c. Finding contact information
  - d. Communicating through chat
  - e. Sharing and planning a common schedule
  - f. Getting benchmark data
  - g. Calculating savings and profitability, e.g. grade change

(continues)

(Appendix 3 continues)

h. Getting information about Valmet

i. Something else, what?

16. How would your company like to communicate with Valmet in future?

j. Face-to-face

k. Phone

l. Email

m. Video/Skype

n. Digital portal

o. Social media, e.g. Facebook, Instagram

p. Instant messenger, e.g. WhatsApp

q. Something else – what?

17. How would you like to receive and share material with Valmet in future?

r. Email

s. Digital portal

t. File transfer application

u. Something else – what?

18. Is there anything you would like to add?