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Improving Customer Service level with data visibility and account team´s performance management practices

Customer 360 view development

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ABSTRACT:

Customer data and analysing it has been a major commercial and academic pursuit. Despite this B2B companies have been slow in effectively integrating data driven and cooperative ways of working to improve customer experience and service level. This thesis was commissioned to improve a company's customer centric data visibility and usage in decision-making, especially in diverse key account team setting. Thesis used design science research method with rapid iteration and created a Customer 360 view in Power BI. Co-creative meetings, interview, and end-user testing were had and the version in the scope of the thesis was validated using a survey that will allow further development. This thesis was time limited causing the customer success results and subsequent development of the 360 view to be left of scope. Thesis shows that account managers need digital tools and resources to lead account teams and that there exists a disconnect between implementation of key account team management work practices and the mandated guidelines. Typical B2B aftersales spare parts ordering process is presented as part of the study. Key account teams using tools like Customer 360 hold great potential to understand the customer and the ordering process and thus provide data driven insights to improve customer experience. Besides offering key account team related suggestions and novel 360 view to the company steps to continue development are given. Future avenues of research are suggested and recommendations for developing similar projects are made. Rapid iteration and stakeholder inclusion from the beginning is a way to generate positive engagement and successful minimum viable product. The importance of effective data usage and sharing is highlighted to achieve improvements in customer service level.

KEYWORDS: Customer 360 view, data driven decision-making, account team, global virtual team, B2B, high performing teams, iterative development

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Tiivistelmä:

Asiakasdata ja sen analysointi on ollut merkittävä kaupallinen ja akateeminen tutkimusaihe. Tästä huolimatta yritysmyyntiin keskittyvät yritykset ovat olleet hitaita kehittämään ja integroimaan tehokkaita datalähtöisiä ja yhteistyöllisiä työskentelytapoja kehittämään asiakaskokemusta ja palvelun tasoa. Tämä diplomityö tehtiin yritykselle tavoitteena parantaa yhteen asiakkaaseen keskittyvän data näkyvyyttä ja käyttämistä päätöksenteossa. Erityisenä kontekstina tutkielmalle toimii yrityksen asiakkuustiimi työskentely. Tutkimusmenetelmä sovellettiin iteratiivista suunnittelututkimusta, jonka avulla tuotettiin asiakkaan 360-näkymä Power BI-sovelluksena. Yhteiskehittämistä, haastatteluja ja loppukäyttäjätestaamista käytettiin tutkielmaan kuuluvan työkalun version kehityksessä. Lopuksi loppukäyttäjät antoivat palautetta kehitetystä asiakkaan 360-näkymästä sen validoimista ja jatkuvaa kehitystä varten Tutkielma ajallisen rajauksen takia mitattavat vaikutukset asiakastyytyväisyyteen ja näkymän jatkokehitykset jätettiin rajauksen ulkopuolelle. Tulosten mukaan asiakkuuspäälliköt tarvitset digitaalisia työkaluja ja resursseja tehokkaaseen asiakkuustiimien johtamiseen. Lisäksi havaittiin, että päivittäisen avainasiakkuustiimin hallinnan ja työn eroavan siihen tarkoitetusta nykyisestä ohjeistuksesta. Tyypillinen varaosan yritysmyynti prosessi esitetään tutkielmassa. Asiakkaan 360-näkymän tarjoaminen avainasiakkuustiimin työkaluksi nähdään auttavan asiakkaan ymmärtämistä ja kehittämään myyntiprosessia. Asiakaan 360-näkymää käyttämällä voidaan tehdä datalähtöistä päätöksentekoa ja havaintoja, joiden avulla pystytään parantamaan asiakaskokemusta. Sen lisäksi, että tutkielma tuottaa asiakkuustiimille toimintaehdotuksia sekä 360-näkymän yritykseen, tutkielma ehdottaa askeleita jatkokehitystä varten. Tutkielma ehdottaa lähtökohtia tuleville tutkimuksille ja antaa ohjeistuksia vastaavien kehitysprojektien tekemiseen. Nopea iteratiivinen kehitys ja sidosryhmien sisällyttäminen tuotteiden kehittämisen alussa on suositeltavaa luomaan sitoutumisen ja osallistumisen tunteita sekä saavuttamaan mahdollisen version tuotteesta. Diplomityön muita suosituksia ovat datan käytön tehostaminen ja jakaminen organisaatiossa asiakaspalvelutason parantamiseksi.

Avainsanat: Asiakkaan 360-näkymä, datalähtöinen päätöksenteko, asiakkuustiimi, globaali virtuaalitiimi, yritysmyynti, huipputiimi, iteratiivinen kehitys

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Abbreviations

AM = Account Manager

B2B = Business to Business

B2C = Business to Customer

BI = Business Intelligence

CEM = Customer Experience Management

CRM = Customer Relationship Management

CVC = Customer Value Category

DDD = Data Driven Decision-making

DSRM = Design Science Research Methodology

EDW = Enterprise Data Warehouse

ERP = Enterprise Resource Planning

GVT = Global Virtual Team

HPT = High Performing Team

KAC = Key Account

KPI = Key Performance Indicator

NPS = Net Promoter Score

POC = Part Operations Coordinator

RFQ = Request for Quotation

1 Introduction

Data has become the standard for making business decisions in the current digital age but much of the it remains unused or sub-optimally utilized in companies. Most of the existing reporting and business intelligence tools do not go into detail about single customer but focus them on portfolio level. Besides this, data's effective utilization is often locked behind complicated rules and ownerships leading to silo mentality and departmentalization. Increasing visibility and ability to use the data by multiple stakeholders would offer better view of the customer and their pain points.

The case company wants to address this issue and has requested this thesis to provide theoretical framework and recommendations to handle it. Additionally, a modern customer 360 view tool was developed in Power BI, which will apply theory into practice and effect the work process in the company. The tool is intended to be used by a globally distributed virtual and cross-functional account teams to better understand the customer, to identify problems, fasten decision-making, increase effectiveness of action management and through that increase customer satisfaction. The main user for the first version of the tool will be group of employees called account managers which are tasked with forming an account team to manage business related to a customer. Future versions of the 360 view will try to further develop the tool also from the rest of the account team members' perspective.

1.1 Background

The case company is a globally recognized Finnish company doing business-to-business (B2B) in energy and maritime industry. Notable part of its business strategy and operations are lifecycle or aftersales services, such as selling spare parts and field services for their major products with lifecycles often measured in decades. This thesis was requested by one department of that company and is focusing on energy sector business' aftersales services, especially on a customer value category (CVC) called key accounts

(KAC). Other projects focusing on these KAC customers are closely related to this thesis and will utilize its findings and the tool that is developed.

The case company being a global actor has multiple office and workshop locations around the world. It is quite common that employees from multiple locations are assigned to work with the same customer during routine operation as single physical location often lacks all the many roles and employees needed for this combined effort, especially with the rise of flexible remote working possibilities and attitudes. Ideally the same employees are still meant to work together for an extended period of time and are referred as an account team internally, which in theory can lessen friction and onboarding needed to serve the customer allowing the build-up of better customer understanding which in turn can be used to create better customer experience.

1.2 Research questions and problem

This thesis aims to find a solution for a problem: “How to increase data visibility for data driven decision-making and team performance in B2B service?” Thus, the research question is “how to use data driven decision-making and performance management practices for increased customer satisfaction?”. The sub-questions derived from the research question are:

- How to use data driven decision-making and performance management practices in global virtual team?
- What are the elements of modern high performing teams in B2B service business?
- How to manage customer experience in B2B service based on data driven decision making?

In the context of this thesis these questions are novel and solve a need in the company. While the theoretical background for each sub-question is established in the literature, their application in the case company is currently lacking and leaves room for

improvement. This thesis proposes that introducing novel and end-user co-created tools for customer management that offer actionable insights, like the Customer 360 view, customer experience and modern team performance can be improved.

1.3 Methods and limitations

The thesis was done using a design research science methodology and is specific for this company and its needs, though the methodology used in the empirical part can be generalized to wider business to business context or similar efforts. As the research questions can be interpreted quite broadly, their scope needs to be limited to this case and the context of customer relationship management.

Sampling for the early interviews and subsequent surveys was done with the global clustering in mind. The case company has divided its operations into three areas with total of nine subregions and each of the has one or multiple account managers (AM) of which most work with KAC customers. This means that the population size of AMs is around few dozens. Taking into consideration that the same is true for other account team members a stratified sampling method was used as each of the populations are quite homogeneous based on early scoping. In early scoping four account managers were selected and interviewed in-depth, each area being represented at least by one interviewee. The current customer work process and pain points were the focus of the discussions, and the findings were compared to a constructed model from documents available that was done prior to the interviews. The pain points of the interviewees were subsequently ranked in order of priority for them.

Finally after the iterative development work, a survey for all account managers (6 employees) involved in the Customer 360 view development was sent out and had 83% response rate. The number of included account managers can be considered sufficient as they still represent a sizable portion of the few dozen employees and global sampling was used and the received answers were in line with each other and rather

homogeneous. The survey asked for validation of the interview findings, changes made based on those, and about the current process and felt pain points. Also, that survey and released Customer 360 view version was referred as closed beta as it aimed to introduce final major changes and features prior to a global roll out of the minimum viable product. Besides using only the account managers as testers, other stakeholders were invited to try the tool and give feedback in the survey. The company's sales management and development team with their expertise and a parts delivery expert with their insight into the latter half of the parts flow were included in the closed beta. Having the sales management and development team involved in the 360 view development is important as that team is working with the key account management program and its projects that will be using the created digital product. The team needs to plan on how to incorporate the 360 with their own customer relationship management model and hearing their development feedback will be crucial to achieve suitable tool delivery. An analysis of the feedback relevancy and possible influencing factors is made in table 1 in the Results chapter.

1.4 Structure of thesis

The thesis is divided into 5 sections or chapters: introduction, theoretical framework, methodology, results, and conclusions. First in the introduction offers background and need for the thesis, including research gap, problem, and questions. The methods and limitations of the thesis are presented as are the structure and confidentiality matters.

In the second chapter, Theoretical Framework, literature review is done. This is done following a funnel idea, trying to go into more detail and in-depth as the chapter progresses. First data driven decision-making is introduced as a concept, especially in this context followed by high performing teams as the tool created in the thesis will be used to support by horizontal cross-functional and multilocal digital teams. Each of those aspects is also explored. After that the CRM in B2B setting is reviewed, followed by a look into customer 360 view based in the literature.

The third chapter, Methodology, is critical for the thesis' generalization purposes and establishes the research process, methods, and data collection ways and sources. Co-creation and iterative process during the thesis work with the future end users is also presented in more detail. At the end, the thesis reliability and methodology are evaluated.

The fourth chapter, Results, explores the case in detail. It contains the empirical part of the thesis: current and process in the company and the developed tool to improve that process. It also presents the findings from data collection, key challenges experienced by users and analyses them, and how those can be solved or mitigated. Feedback and results from early users are likewise presented.

The fifth and final chapter, Discussion and conclusions, discusses the findings from the results with the established literature. The thesis is summarized, critically evaluated and recommendations for future actions and research are made.

Finally, the Appendix is included after references. The Appendix holds all the questions asked during the closed beta test in the appendix 1.

1.5 Confidentiality

Thesis is a case study for a company and includes the creation of a novel tool for the company. No sensitive or confidential information is shared and information and examples used in the thesis are anonymised and possibly replaced with mock-up data or represented in simplified manner. Customer data and case company employee information used in the development cannot be shared or presented in this thesis. Additionally, the company commissioning the thesis work is referred as "the case company" or "the company ".

2 Theoretical framework

In order to make a better customer centric tool, the academic and professional literature was explored to support it. This is viewed with a lens of creating a new collaborative information and task sharing platform for a cross-functional and global team. From literature perspective the fields of global virtual teams, self-directed work groups, and data driven decision-making are looked for better customer relationship management purposes. Customer 360 view concept is also introduced although the subject matter has very little academic coverage and mostly come from more business orientated literature.

2.1 Data driven decision-making

Data driven decision-making means “the practice of basing decisions on the analysis of data rather than purely on intuition”(Provost & Fawcett, 2013, p. 53). According to Provost and Fawcett that means that while there needs to be data and analysis of it, for example how customers react to ads, the experience and intuition can still play a part in the decision-making process and in reality this varies between organizations. Data driven decision-making has become standard practice for most organizations and presentations with visualisations for management are a common way to report results or seek approval for actions. Better data-access and integration have made real-time reporting more common as it allows to track performance and the set targets.

According to Brynjolfsson and McElheran (2016) data driven decision-making (DDD) has increased productivity while it has been adopted rapidly with sometimes uneven methods and results. That was caused by differences depending on the way DDD was implemented and integrated in processes and organizational culture. However broadly in practical terms they conclude: “Better data creates opportunities to make better decision” (Brynjolfsson & McElheran, 2016. p. 138). Based in real cases, DDD offers the chance to increase revenue and profits without increasing prices while improving service quality (Bar-Gill et al., 2024).

With the adoption of increased data collection, such as seen with Industry 4.0 and Internet of Things (IoT), the case for many opportunities can be seen (Holmes et al., 2023). However, especially business-to-business companies are often failing to capitalize on these opportunities, according to Holmes et al. They suggest that B2B-firms are unwilling to cooperate within their industry despite that more data sets offer increasing learning opportunities, not to mention how the lack of dialogue and standardization makes current comparisons harder. This has also contributed to the lack of wider research by academics into "how firms derive benefit from using information and data to deliver competitive advantage through customer value . . . and what the critical elements to success might be" (page 1296).

One of the end goals of DDD is to efficiently create customer value. Service-dominant logic (SDL), especially in B2B, has increased in prominence during the digitalization of the turn of the millennium, which mean that value is co-created with the customer, not just by selling goods (Holmes et al., 2023). Holmes et al. (2023) present that this value is created by utilizing data and gaining insights from that. So, in order to transfer from traditional supplier role to more co-creative customer relationship data driven approach is needed to better understand and support the customer. At the same time companies with multiple product offerings can use DDD in their product portfolio management (PPM) to create 360-degree data model to create solid understanding of products' commercial focus with real time analytics (Hannila et al., 2022).

A closely related idea to DDD is the data driven innovation (DDI), which means that data is the core ingredient for an innovation, that is thought to be a competitive edge in future (Eriksson & Heikkilä, 2023). Currently "[B2B] companies accumulate a wide array of data nowadays, such as financial and CRM data, operations data, and environmental data. Yet, few industrial companies have been capable of leveraging these vast amounts of data for improved products or services" (Eriksson & Heikkilä, 2023, page 158). Largely these business innovation come as ways to support decision-making, improving organizational processes, or as methodologies to resolve challenges to create customer value.

Eriksson and Heikkilä's (2023) framework for the DDI in B2B context and it has 3 technological and marketing elements as seen in figure 1. Technological side is the ability to obtain the necessary data ability to combine data from different sources, and ability to analyse the data while the marketing one is ability to innovate and deliver superior customer value, ability to capitalize on the customer as an asset, and ability to capitalize on the brand as an asset. To create data driven innovation all of these elements need to be understood and considered.

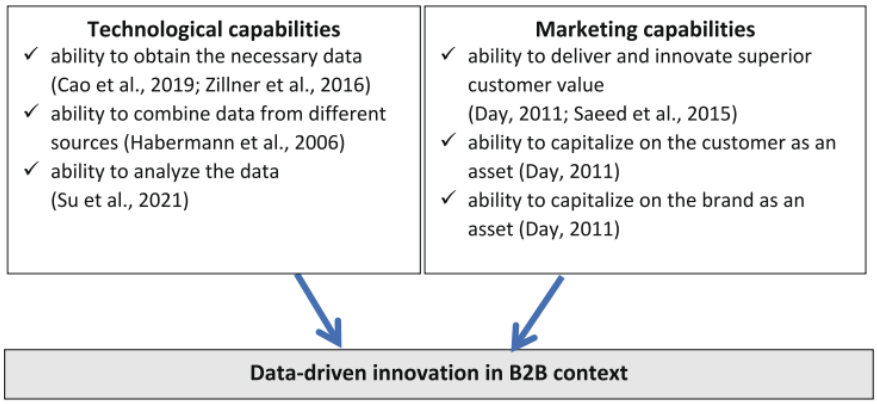

Figure 1. DDI theory-based framework (Eriksson & Heikkilä, 2023).

Common challenges for data driven innovations in industrial B2B are low quality legacy data, lack of data standards, and complex organizational structures causing friction when dealing with data, according to Eriksson and Heikkilä (2023). At the same time, they recognize that many companies fail to co-create and involve customers in developing data driven solutions. A DDI will not be successful if either technological or marketing side fails. In B2B, it is crucial to have a deep understanding of customer needs as the potential customer base is not as vast compared to B2C (Eriksson & Heikkilä, 2023). This means that information about those needs should be understood across the firm. Eriksson and Heikkilä recommend manufacturing companies should "develop processes and structures that support and even enhance information sharing across different organizational units, to build a collective understanding of customer needs and the firms' possibilities in responding to those needs".

2.2 High performing teams

High performing teams (HPTs) and its numerous related names and concepts are not a recent idea, and the research field itself has long history. In this thesis high performing team means outperforming traditional industry expectations and norms using novel set of skills and competencies or approach (Petrova, 2022). This research field has a sizable background as Zuidema and Kleiner (1994) already discuss this research topic as result of 80s employee empowerment movement in management. Their definition for such self-managed high-performing cross-functional team, or as their preferred the term self-directed work groups (SDWG), still lays foundation to research today. SDWG are described as a small collection of employees, usually six to ten, with authority to make middle and line management level decisions. According to Johnsson (2017, p. 25) these teams ”were intended to have more flexible structures, to be cost effective, to overcome built-in bureaucracy, to speed up product innovation, to cut through hierarchical decision-making procedures and to respond quickly to changes in work conditions”. He importantly adds these teams bring employees from different departments together and this cross-functional skillset is crucial factor of their problem solving capability.

This thesis focuses on digital or virtual team rather than traditional teams. Some researchers make a distinction between virtual and digital teams but for the purposes of this thesis these are indistinguishable and mean “a team [that] uses technology and virtual tools mostly to communicate and interact with each other due to the large physical distances between the team members” (Petrova, 2022, p. 34). This is also known as global virtual team in literature.

Teams undergo lifecycles and need to organize, distribute roles, clash, agree and develop before starting to perform as presented by Tuckman (1965). The team lifespan can be divided into four main phases that are forming, storming, norming, and performing (Tuckman, 1965). In order for a team become an HPT it needs to have factors for it already during formation stage (Petrova, 2022). Traditional and digital teams share many

performance elements but also have unique factors too as seen in the figure 2 (Petrova, 2022).

Figure 2. Suggested performance factors of teams in literature (Petrova, 2022).

Literature suggests that factors contributing to a high performing team can be categorized into individual, group, emotional, and environmental factors (Petrova, 2022). During forming stage individual factors are recognition of needs, positive risk taking attitude, adaptability, cross-cultural communication, belief in efficacy, and individual skills. For group level forming factors managing the team composition, setting clear targets and responsibilities. Having a diverse team with skilful, yet soft, leadership that allows freedom for members to pursue set targets and supports the growth of members is common success factor (Petrova, 2022).

On the performing stage individuals need to be involved, engaged, and motivated. On group level, communication is crucial to getting the members agree on the goals. Collaborative decision-making process and consensus building are also important and successful coordination is required, especially with distributed teams (Petrova, 2022). Despite

this teambuilding is often challenging to achieve with virtual teams. The emotional factors for HPT include trust, cohesion and creating a good social climate. Managing raising conflicts and keeping positive outlook is needed to maintain high performance. Finally, Petrova (2022) states, that external factors, such as time constraints, urgency, alignment with team's stakeholders, team's given goals, and functional workspace and process, all affect the performance and are hard to control though could be prepared for.

One of the important qualifications for HPTs is the trust and open communication. This can be seen to mean that the teams need to be able to discuss and admit failures and mistakes (Castka et al., 2001). This should be preferable done early so damages can be minimized and situation fixed. In a high performing team, some tolerance for failure and a culture that is supportive and ready to learn from them is needed for high performance. At the same time, a team with performance monitoring and clear teamwork process can create redundancy in preventing and managing errors (Bell & Kozlowski, 2011).

While groups and teams are used sometimes interchangeably in the literature and industry experts clearly differentiate between them. Teams differ from groups as they are more interdependent and long-term "members are mutually reliant on one another in order to complete their work and achieve their goals" (Reimer et al., 2017, p. 2). Compared to that, groups have a shared goal but members are hold responsible only for their own results (Zoltan & Vancea, 2015). Work teams are seen as more integrated type of work group meaning that all teams are groups but not vice versa. Groups becoming teams has been one way to achieve high performance (Katzenbach & Smith, 1992). For a group to become a high performing team, a goal and challenge is needed while moving the focus from personal performance to collective performance. A high performing team needs to have small number of members, complementary skills, strong and shared sense of purpose, common service or product to obtain, understanding of tasks, and mutual accountability (Katzenbach & Smith, 1992). This thesis will propose that there are also overlap and hybrid models, like a core work team and extended team that will function more like a group supporting the core team with fewer meetings. Trying to force a true

team model where it does not naturally occur will only have detrimental effects as establishing the team model for core members in a distributed virtual team is a challenge on to itself.

2.2.1 Multilocality and virtual teams

Today much of the work is increasingly done by digital and virtual channels. Especially after Covid-19, remote working, work flexibility and virtual meetings have disrupted the traditional workplace team dynamic with local face-to-face practices (Schweitzer et al., 2020). Even though the distributed and global work trend with more horizontal organizations existed prior to this (Kayworth and Leidner, 2002) the recent socio-cultural and technological developments have better facilitated the effective workings of such teams, also known as global virtual teams, GVTs (Schweitzer et al., 2020). Developments in communication technology with file sharing, co-creation, scheduling, and visualization tools have made distributed teams more viable allowing a GVT to serve multiple location and offer diverse skills more readily (Walsh, 2019).

One of the main challenges of teamwork, especially with virtual teams, is effective communication, knowledge and work distribution. For this purpose multiple tools and services have been developed but those often lack integration in practice despite often coming with some features to support that as vendors still want customers using their own products (Schweitzer et al., 2020).

Schweitzer (2020) explores one solution, Digital Teams platform, for this problem. Some of the key findings and ideas based on their early work states that seamless integration of working software or tools and having a dashboard for communication and visualization purposes is important for the collaboration to be a success in case of virtual and distributed teams. For communicating as team there are multiple tools with different levels of involvement and effectiveness ranging from emails, instant messages, calls, online meetings, to in-person meetings (Walsh, 2019). A correct method or combination

of them should be used for effective cooperation as sometimes more involved methods offer no better results but take more time and require coordination. Choosing a correct approach is crucial as conflicts arise more readily in virtual teams while trust building is also harder compared to traditional teams (Reimer et al., 2017).

2.2.2 Managing a flat global team

Managing a traditional team is a research field on its own and to do that in a horizontal and global setting introduces new challenges. In this thesis a flat global team means not necessarily a true peer lead team but a team whose members are located in different locations and the team lead has no formal leadership or management position.

Depending on who and where the team members are there could be additional challenges that require cross-cultural skills as the teams are often diverse. A good virtual leader should consider the different cultural dimensions and norms, such proposed by Hofstede, (Kramer et al., 2017) to avoid pitfalls and shape their approach and communication. Otherwise, misunderstandings and trouble getting members to engage in the collective effort can occur.

According to research there are identifiable opportunities and challenges with these kinds of teams. The most well-known challenge for global virtual teams is time-zone dispersion causing communication and meeting disruptions and worsening work-life balance (Jimenez et al., 2017). This makes coordination of teams based in multiple location much harder. Second major difficulty according to Jimenez et al. (2017) is the language and various levels of fluency for a possible shared work language. This is compounded by the fact that virtual communication often lacks nuances found in non-verbal communication and while there exist more advanced communication channels that minimize this problem those are rarely used or utilized effectively.

Other major challenge brought by the nature of GTVs is, for lack of better word, a sense of unity and belonging. Members of GTVs have no or seldom chances for teambuilding

or bonding which otherwise would foster trust and commitment. Likewise, while diversity can be seen as an asset with many such teams, it can present many issues and conflicts (Jimenez et al., 2017). For example, a team could inadvertently split into more like-minded sub-teams causing different organizational environments to not work or communicate effectively.

The current consensus according to Jimenez et al. (2017) would suggest that global virtual teams face added difficulties in achieving the belonging and purpose compared to traditional teams. According to Jimenez et al. (2017), "Socializing – an essential pre-requisite for good collaboration and essential in doing business in high context cultures – risks being neglected, and, as a consequence, trust-building and team-effectiveness can be compromised . . . ". Jimenez continues "Often, GVT members are no more than an email address to one another . . . " (page 344).

Some of the other management ideas that Jimenez et al. (2017) advice to focus on with GTV is their nature, short or long, and use of brokers with their own considerations. A cultural or organizational broker, a facilitator or local manager, could prove helpful in short-term but hamper long-term teambuilding and work. Kramer et al. (2017) suggest that when building virtual teams care should be taken when choosing members for best results and just appointing employees without considering their operational context is ill-informed. Ideally members should be virtually capable and culturally intelligent or preferably receive training to ensure that.

2.2.3 Leading without formal authority

Leading without formal authority means that leader or manager of a team or group is not assigned organizational power as the members do not report to him while the leader is held responsible for outcomes of the team (Melcher & Kayser, 1970). This can happen for example when a cross-functional team is formed from employees coming from different departments to address a specific issue. Such teams can be ad-hoc to address a customer issue or opportunity for example, or more long-term, usually when needing

diverse skills to develop a process that has a limited scope not needing a dedicated and costly formal organization. An informal leader must lead authentically as they have little formal commanding rights (Pielstick, 2000). To achieve this, creating a shared vision and inspiring the members to pursue it is needed. Pielstick (2000) proposes that good relationships and community building, guidance, and character qualities must be present to succeed as an informal leader.

While informal leadership is demonstrated to create more commitment and performance, it can also cause difficulties and risks, mainly exhaustion and increased work load (Chiu et al., 2021). An informal leader has only a limited amount personal resources and energy to do his personal and leadership tasks, and those can deplete. This will likely lead to lowered work satisfaction and performance. Negative effects and feelings in the team lead will also affect the rest of the team. Supporting the leader with sufficient resources, allowing them actual decision-making power and leadership style and autonomy over task and schedules are necessary to have them functional and satisfied (Chiu et al., 2021). Formal leadership can support and monitor the informal leader while providing examples how to lead. Chiu et al. (2021) warn that failing to provide enough formal support and motivation for informal leaders will result in worse outcomes for all parties. This thesis theorizes that providing that support by strengthening account team process and offering an actual tool for that cooperation will empower the informal leader to their work and lead their team more effectively.

2.2.4 Key account teams

Concepts like key account management (KAM) and key account teams are closely related. Key accounts are organizations important customers and are given extra attention because of that (Salojärvi & Saarenketo, 2013). They usually make a significant amount of the company's revenue, have a long-term relationship, and are contrasted to many smaller customers that a company could have. Key accounts and management are hallmark of business-to-business markets and offer mutually beneficial benefits (McDonald

et al., 1997) and can have a key account team coordinated by a key account manager. Key account team (KAM team) is serving a key account customer and is also meant to support and develop the relationship (Salojärvi & Saarenketo, 2013). Ideally the objective is to form a involved and collaborative partnership with shared goals (McDonald et al., 1997). A challenge with these teams is their informality as members do not report to key account manager while multiple people are communication with the customer in various levels making key account managers relationship management work complicated. Also, a KAM team can be a dedicated or fluid team meaning if a team is more less permanent and fixed, trying to develop lifetime value, or if it is an ad hoc, build for an opportunity and will be disbanded afterwards (Lai & Yang, 2017). In this thesis mainly dedicated team is discussed as the focus in long-term customer relationships.

Effective KAM practices are seen to provide returns on investment and boost productivity (Silva, 2025). This done to increase data driven business decision making while making it easier to catch customer pain points. However, Silva (2025) points out that digital tools can also fail in their implementation, especially during complicated interactions. Still, it remains to be seen if the problems are actually caused by the new tools or do the old processes and knowledge need updating to better leverage them. It is likely that a mixture of digital and traditional channels leads to best outcomes in future key account management. Current research suggests that using data to make analyses and generate actionable insight should be paired with personal and human interaction with the customer to implement them as customers value authentic and personalized service (Silva, 2025). As seen in Figure 3, an effective modern KAM will have customer data collection that is then managed and transformed into insights with data analysis with help of various tools and platforms, like business intelligence.

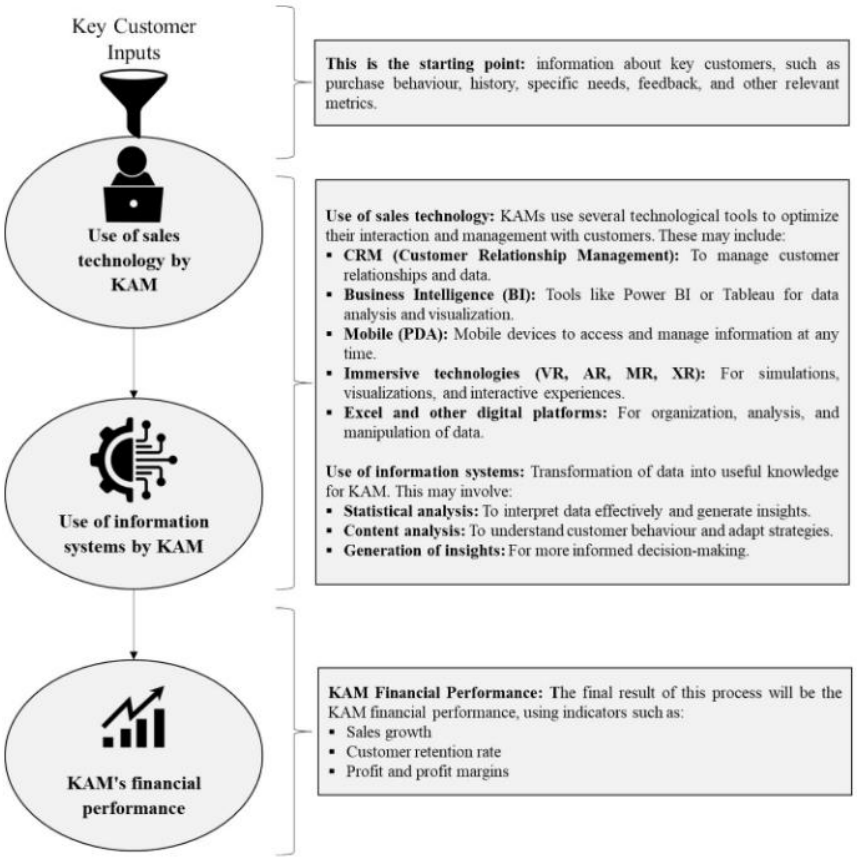

Figure 3. Key account management and customer data management (Silva, 2025).

Internal knowledge for understanding a key account from multiple individuals can also be utilized by having a "forum for pooled intelligence and learning from peers and by fostering the generation of new ideas, practices and, as a result, more efficient utilisation of knowledge with regard to the development of own offering and sales strategy" (Salojärvi & Saarenketo, 2013, page 998). With proper understanding of data and its significance, key account management can achieve its ultimate goal of improving customer specific financial performance. This will require diverse data sources that are then pooled to suitable forum to allow having and sharing that information in a group or team setting.

2.3 Customer experience in B2B service business

Customer relationship management (CRM) is an established field of research, especially from B2C viewpoint, with different definitions but can be condensed into the increasing customer satisfaction by adopting a more customer centric organization and practices (Zeynep Ata & Toker, 2012). A more detailed description for CRM used by this thesis is given by Payne and Frow (2025) as provided below.

> *"CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of relationship marketing strategies and IT to create profitable, long-term relationships with customers and other key stakeholders. CRM provides enhanced opportunities to use data and information to both understand customers and cocreate value with them. This requires a cross-functional integration of processes, people, operations, and marketing capabilities that is enabled through information, technology, and applications." (Payne & Frow, 2005, p. 168)*

Moving to a more service orientated business model, as opposed to simply selling goods, to solutions and services offers the company to form better customer loyalty and increase switching costs (Wirtz & Kowalkowski, 2022). At the same time opportunities for strategic partnerships can form easier. This is similar outcome as seen with the customer value creation with service dominant logic (Holmes et al., 2023). Wirtz and Kowalkowski (2022) continue that: "success hinges not on the number of products, spare parts, or billable hours sold but on the outcomes of the value-creating process—for example, guaranteeing a specified level of availability or achieving an expected level of performance" (p. 15). To achieve this, changes need to be made to the existing organizational structures and capabilities in the company (Baines et al., 2009).

Customer satisfaction is one of the thing under customer relationship management as it tells about status of the customer relationship (Zeynep Ata & Toker, 2012). It means how happy customers are with a product or service and the customer overall experience which will in turn impact how loyal customers are and it effects how the company is seen in the market. Customer experience meanwhile is subjective response to any and all

interaction with a company, the many touchpoints in customer journey, and company's offerings (Ranieri et al., 2024). Customer journey is a useful concept to understand, and often map, how a customer experiences dealing with a company from hearing about the company to post-sales activities (Ranieri et al., 2024). All of these concepts are related to each other but offer different outlooks on how to see the situation. Customer satisfaction could be seen as a simplified measure of customer experience at a given time. This can be done with a tool like net promoter score (NPS).

NPS has become widespread simple tool to condense the customer sentiment, and it operates by dividing customer feedback from a scale of 0-10 to promoters, passives, and detractors based on if they would recommend received the company's offering to their peer (Dantas Sartori, 2024). NPS acts as good and simple proxy for customer satisfaction for an overview purposes though because of its simplified nature a more detailed data gathering measures should also be in place (Dawes, 2024).

By working with interested customers, such as with key accounts, customer satisfaction and experience can be improved by mapping out customer touchpoints from customer journey and then weighing them based on importance using internal and external opinions. (Aichner & Gruber, 2017). This can also be collaborated by asking the wider customer base about which touchpoints are important for their satisfactions. According to (Aichner & Gruber, 2017, p. 138), "[t]he more important and/or the higher the importance for customer satisfaction of a specific customer touchpoint, the more time, effort, and financial resources should be invested in improving it" as companies have only limited resources to improve their service.

2.4 Customer 360 view

Customer 360 view, single view of customer, or 360-degree customer view, is less academically researched subject, especially from business-to-business outlook. Much of the literature about it comes from business environments and experts. Based on the guides

and books written about it, Florea et al. (2021) defines customer 360 view as holistic vision of the customer with four elements. These are customer's demographic features, interactions, history of transactions, and customer experience, often in form of a dashboard or report (Florea et al., 2021). This allows viewing that information from multiple sources, ideally with real time data (Satish & Yusof, 2017). Thus, it provides a single view of a customer to better easily grasp and understand its relationship to one's organization. According to Florea et al. (2021) the main benefits gained from the 360 view, including a stronger CRM foundation, are the ability to better assist the customer during communication and find opportunities to reduce operating costs. McKinsey reports that digital leadership can provide multiple times more revenue growth compared to their peers in B2B companies which have traditionally lacked in digital maturity compared to B2C (Catlin et al., 2016). They attribute customer 360 view as an important tool for end-to-end connection of processes to improve insight and decision making.

> *"-- success requires close coordination from front office to back, and while many B2B companies have done a good job automating the back office, they fall short when it comes to connecting those processes to the front end. That lack of integration can lead to multiple customer handoffs between functions, long turnaround times for quotes, missed delivery dates, and a proliferation of unnecessary technologies, applications, and data.*
> *DQ leaders do it differently. They use automated decision-support processes and other tools to link finance, accounting and ERP systems with customer, sales, and order data to generate a 360-degree view of the customer across the business. That interconnected network lets sales teams access all the client service, support, and financial information they need prior to their customer interactions, and it gives operations teams greater transparency into the sales pipeline to assist with resource and delivery planning."*
> *(Catlin et al., 2016, p. 6)*

Important function of customer 360 view is the ability to visualize data. With visualizations error and anomaly troubleshooting and detection becomes easier (Satish & Yusof, 2017). Industry experts state that the reasons for customer 360 view are achieving unified customer view, effective customer segmentation, better customer experience, data driven decision-making, and better customer satisfaction (Kirvan & Hanna, 2024). Examples of different topics that could be included are seen in the figure 4 (Liliendahl, 2020).

Unified view allows creating a customer profile which in turn helps understanding the behaviour, preferences, and needs of the customer. Likewise, using the customer 360 view to access and view data and analytics about the customer can offer wider visibility to employees that do not have that access otherwise (Kihn & Lin, 2024). This contributes to a common view and understanding of customer.

Figure 4. Theoretical model for customer 360 view in the industry (Liliendahl, 2020).

Using and building a customer 360 view has some design principles. It should have integration to different applications used when working with customer, data have single source of truth, real time data collection from customer touchpoints, refining data in the flow (such as AI or machine learning), automation of simple tasks, ease of use, and partner ecosystem or outgoing integration based on the decisions made (Kihn & Lin, 2024).

On the other hand, the development of a functional yet simple customer 360 view does not need to be too complicated. A good starting point for one could be an overview page artefact, a so-called Client-On-Page or Customer On A Page 360 view as was done for IBM (Magee et al., 2016). Iterative development process with heavy involvement and feedback was an important consideration in that development process. In the figure 5

the four major different iterations from a list of features with some simple logic to an actual user-friendly board showing key indicators can be seen.

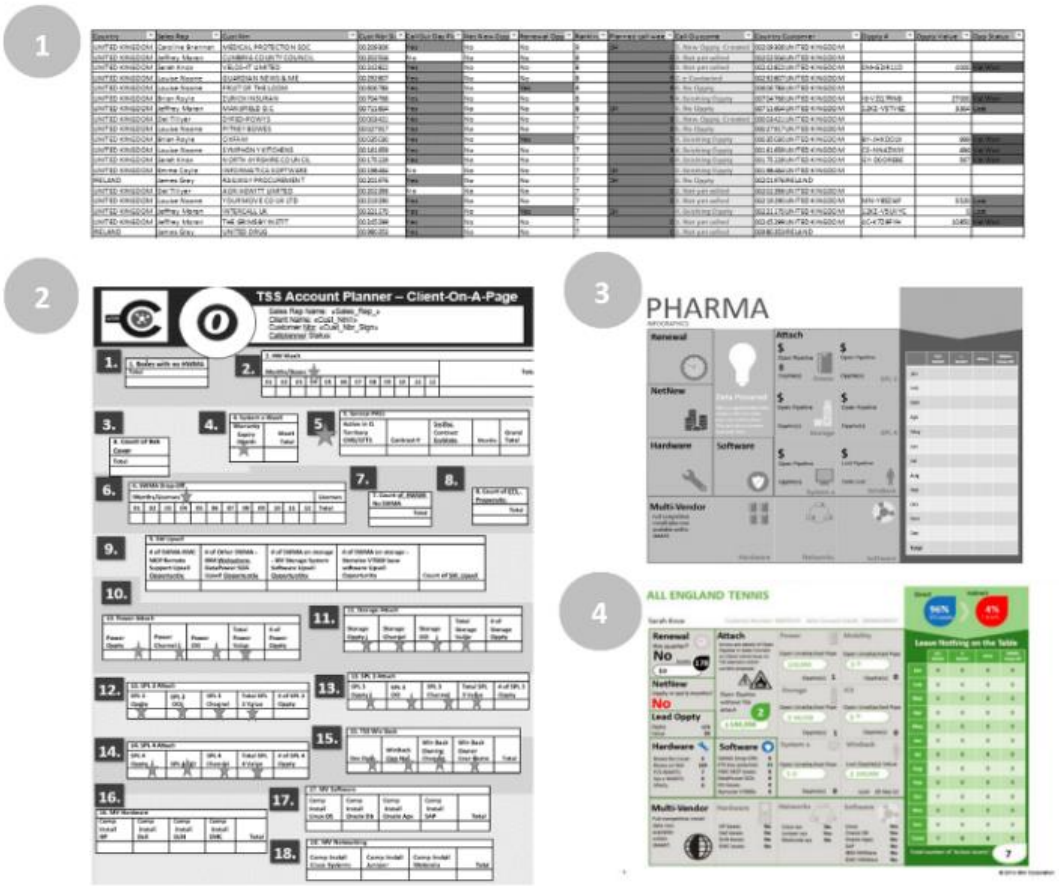

Figure 5. IBM's client-on-a-page iterations (Magee et al., 2016).

Magee et al. (2016) note that when building a customer 360 view, especially in future, three key concepts should be considered: data management, visualization, and change management. Data needs to be trusted and understood and be up to date. Visualizations are especially useful for sales personnel as they feel strongly about those and are easy present to external users while making sure that there are actions that can be taken based on that visualization. In other words, what is the narrative a visualization is telling. Change management needs to be considered as the product will evolve during iteration and will likely receive resistance, especially if it is able to uncover uncomfortable insights.

The results that can be achieved by creating this single view of customer are notable but require correct use and process. Kihn and Lin (2024) stated that “it can be useful to think in terms of *signals* and *actions* – that is, information detected by the platform that would previously have been limited to siloed system … can trigger an action in another system related to the same customer” (p. 16). With that information proactive customer service can be done. For example, employee communicating with a customer could be able to receive advance notification about likely delay with a delivery and inform customer about it and thus mitigate potential losses or dissatisfaction with service. With better visibility, signals from different departments can be perceived while mistakes or opportunities previously passing unseen can be found by employees previously not dealing with those aspects of the process. While the customer service and relationship management is done by employees in sales, often referred as account manager, this improved visibility allows development of customer relationship to include people with expertise from other departments effectively.

The actual functionality of 360 view still requires that it is successfully adopted and utilized by the relevant individuals. Magee et al. (2016) noticed that in their case there were seven critical success factors that drove the most important user, seller, adoption. Using 360 view should be easy and integrated to their normal everyday work process. Person who to contact once an opportunity or issue is identified should be clear. Having the ability to have more detail, also known as drill-down, about the discussed topic will make communication easier. Visual to tell the story to make the case is needed to achieve understanding. The data and visual shown must be accurate and recent as otherwise users will not trust the 360 view. Users need time to focus on the findings based on the 360 view. Finally, having easy access to support based the findings is needed to actually utilize them effectively (Magee et al., 2016). It should also be noted that while planning and doing the development for a 360 view some key things need to be considered, especially when it comes to users. First, the data and process need to be in working order. Secondly, end users need to be onboarded, and the concept sold to them. Thirdly, users need to be engaged and supported using the new process, the 360 view. And finally, the impact

of the new way of working needs to be validated (Magee et al., 2016). Additionally, customer centricity and starting with focused high value customer group in mind should be the scope of a prototype 360 view (Magee, 2016). The prototype meant for sellers was able to find thousands of new opportunities and generate additional 9% of new won deals in value while being able to decrease time daily spent on non-core task by 50 minutes, due to the 360 view, increasing seller productivity by 10% (Magee, 2016).

A lot of research and industry attention is being placed on integrating and utilizing AI tools for understanding and serving customers (Kihn & Lin, 2024). Main points for using AI is to draw insights from customer feedback and personalize the offered customer service (Kirvan & Hanna, 2024). Some restraint is still present as companies prioritize or worry about safety, brand image, misinformation and hallucinations, and data-access. Besides large language models, generative AI, and machine learning, more traditional computer predictions can be done and visualized. Trends can be spotted and future actions planned in a comprehensive manner to be shared with relevant stakeholders to adjust their own operation.

Introduction of customer 360 view and its more customer centric service approach is believed to bring value and cost reductions according to industry opinion (Böringer et al., 2019; Kihn & Lin, 2024). At the same time customers' expectations are rising and needs to be addressed. By gathering data into 360 view from disconnected sources those expectations can be met by automation and new technologies, such as AI that has been integrated into customer service. Therefore, the creation of customer 360 view is a right step to provide a competitive customer experience in evolving business environment.

3 Methodology

This thesis was done for a global Finnish company with over ten thousand employees. It is mainly involved in energy and maritime industries. The company has wide portfolio of products and offers aftersales services for them, such as upgrades and spare parts. The main deliverable, Customer 360 view, is designed to support said aftersales activities. The company is improving its service business and want better ways to introduce customer centricity in its activities and build cross-functional teams to improve customer experience.

During the empirical part of the thesis multiple interviews and meetings were held with various stakeholders of the case company to develop the customer 360 view. First, development team was gathered, and the scope of the project was agreed. Structured interviews were held with future end-users to identify key issues and features needed to be included in the product. Follow-up meetings with internal experts were had about those findings to find reliable data-sources and validate understanding. The tool was iterated and tested rapidly with co-creative feedback sessions held together with the testers. Finally, a closed beta version close to minimum viable product was tested internally and survey for possible future improvements before release was made.

The development team in this project consisted of the one main developer, I the thesis worker, and three notable support personnel, two of them whom offered data extraction support and coaching, and one general thesis supervisor with expertise in stakeholder management and presentation.

3.1 Design Science Research

This thesis applies design research science methodology (DRSM) as it seeks to address real business world problem and need by delivering a tool, which is in DSR artifacts terms

an instantiation. The tool delivery pipeline for the purposes of this thesis can be roughly divided into a scoping and design phase, data collection, tool creation, iteration and early user testing, and closed beta testing with feedback collection for future development and global launch. The methodology and development process is also presented from a DSR standpoint.

According to Peffers et al. (2007) a typical information system design science project can be divided into six sequences or activities with possible, or even expected, iteration and movement between them, seen in Figure 6. These are problem identification and motivation, define the objectives for a solution, design and development, demonstration, evaluation, and communication. While this thesis does not follow design science research methodology strictly it has a lot of overlap and basic flow common with it. Reason for this deviation is the limits of master's thesis, scope and limitations of the project and its allotted time, and comparative heavy inclusion of the theoretical aspect in this thesis.

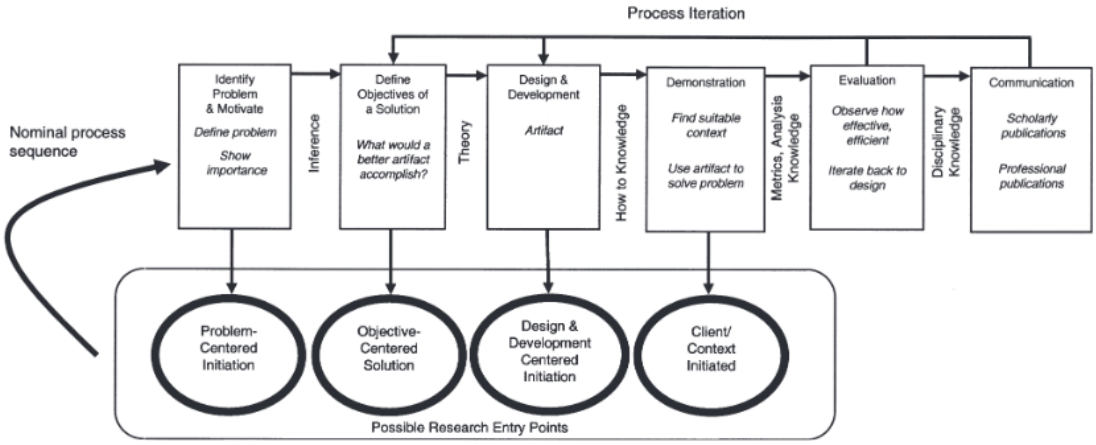

Figure 6. DSRM process model (Peffers et al., 2007).

From a DSRM point of view the thesis work is client initiated as it has clear mission from the company which focuses on using the tool rather than the actual tool or creation process itself. Likewise, the ultimate evaluation of the created artifact, Customer 360 view, will be left out of the scope of this thesis as effects of its usage will be seen much later, likely after next customer satisfaction collection round next year. Tool will also receive

further development which will be partly informed by findings of the feedback based on the release version developed during this thesis work. As proposed in the DSRM process model by Peffers et al. (2007) the development is an iterative process of defining, developing, demonstrating, and evaluating. In practice, the developer should test their product and then further develop it based on the feedback and findings.

Important consideration for this thesis methodology is the data gathering in the design and development phase, especially when working with fractured data environment trying to create a cross-departmental product. Data ownership, management, and access can lead to challenges with getting the data for a project or to know what data is available and how it is currently being used. Discussions for getting access to data will take time and thus have downstream effects for development process. Thus, data managers and their superiors become a critical stakeholder for a project.

3.2 Research design

This thesis aims to find a solution for a real-world problem in company: “How to increase data visibility for data driven decision-making and team performance in B2B service?” Answering this question will have academic and managerial implications. Thus, the research question is:

RQ: How to use data driven decision-making and performance management practices for increased customer satisfaction?

In order to answer the main question and integrate the findings in practice, data driven decision-making, performance, and customer experience management were explored in detail. The sub-questions derived from the research question are:

RQ1. How to use data driven decision-making and performance management practices in global virtual team?

RQ2. What are the elements of modern high performing teams in B2B service business?

RQ3. How to manage customer experience in B2B service based on data driven decision making?

While the theoretical background for each sub-question is established in the literature, little academic literature exists combining these in a business setting. As the thesis is supposed to address the practical problem a solution was developed in form of software solution, making thesis a design study. The findings from literature were paired with user needs to build a modern day solution for the company. The development itself also incorporated agile principles with heavy focus on the customer, or end-user, collaboration and responding to changing need and capabilities. The final deliverable is also just minimum viable product and is intended to be developed further.

3.3 Scoping and stakeholder interviews

In modern large company there are multiple different departments, and the amount of data and different internal processes are huge and varied. With the increasing size and scope, it becomes difficult to find any single expert capable of understanding all the steps and internal knowledge and needs related to the explored area. It is not uncommon for there to be also friction when working with different departments caused by conflicting interest, distrust, or just organizational structures.

To determine the needed features and the limits of the tool different stakeholders were consulted. First drafts were based on the basic needs that were identified by a departmental development team that commissioned the thesis and refined further. The first version scope was limited to have basic functions related to the overall customer information and focus on spare parts delivery. After drafting the basics, a more detailed understanding needed to be gained from interviewing different parties involved in the service pipeline as there was limited common knowledge between them. Key employees were chosen from these departments involved in the development team's early scoping. In addition, Power BI, data, and reporting professionals were also heard and data experts

supported the development process, especially on the technical side of data architecture and modelling.

Important early step was the feature planning for minimum viable product (MVP) that was done collaboratively in using tools like Miro board. Miro is a collaborative web platform, especially made to support creative teamwork and innovation with multilocality in mind. The key employees, in this case the account managers who were thought to be the most important stakeholder group were given voice and opportunity to direct the development direction, as they will be leading the adoption and future use in their account teams. Representatives from each of the global areas were included in this step to achieve comprehensive requirement list while trying to deliver a solution that would work for all places of operation. This is contrasted to current ways of reporting and management where there exists patchwork of local solutions across multiple platforms. The interviewees were given information about the project prior to an online meeting and were asked to think things that they currently lack visibility. During the meetings first the project and its development goals and objectives were re-introduced followed by structured phase of questions feature planning. Latter half of the meeting was a more open and had collaborative feature exploration where the interviewee was given the opportunity to voice their current pain points and things that could help to address them. The meetings were recorded and transcribed for later use and reference. Their approximate length was one hour. Additionally, modern AI tools were utilized to provide summary of the meetings and identify the key features discussed with the interviewee.

Interview sample size of four could have been larger and broader but that would have led to larger scope or losing the focus of the study. Concurrent lines of inquire, like familiarizing with guidelines, consulting internal experts, and reading real documented work steps, was done to validate interview findings to increase their reliability. The interviews being a qualitative data collection method are not subjected to the same level of statistical scrutiny but still require analysis about the possible biases and usefulness. Interviewees can also be quite subjective and can lack standardized and measurable

feedback. Usually introducing change will cause change resistance as most prefer to stick to the current and familiar ways of working. On the other hand, it is quite common for internal projects to receive overly positive assessment leading to failures to end ineffective projects. Such, careful consideration needs to be exercised when interpretating feedback especially when it is given directly as that could make expressing criticism harder.

The summaries, notes taken, generated Miro content, and verbal feedback was later used to create first a points and features raised by the account managers in each interview. A MoSCoW method or board was then constructed based on the account manager feedback. MoSCoW is used to identify and prioritize features to be delivered in a given development cycle and is useful for achieving effective resource and work planning. It is also useful for finding and delivering a minimum viable product as an outcome.

This was then translated into actionable tasks and visualizations that could be created in the finished product in form of a feature board, also made in a MoSCoW board format. Feature board is discussed in more detail later in results. The feature development was done with the aid of kanban board with its to-do, in progress, and done categories. The feature board was used to identify the key requirements to achieve a minimum viable product to be delivered as the development was had to utilize the resources afforded to it effectively. For data source planning purposes, the feature board was also used to establish the necessary data imports and data model requirements.

3.4 Iteration and user testing

The tool iteration used in the development process can be divided into three different categories: rapid user interface iteration, co-creative iteration with key users, and feature iteration with end users. The small development team allowed quick and agile iteration loops. While all of these iterations followed their own loops they can be worked

multiple times and concurrently as the complexity and organizing difficulty to gather feedback from them varies as well as the time investment. Additionally, the iteration and development will continue outside the scope of this thesis by the case company.

User testing phase was especially important to spot and learn issues that affect specific groups or areas outside of development's own quality testing. Certain customer can have specific situations that are not represented well on the report or there could be data or documentation practice differences between different regions breaking some functions. Spotting these without end user testing and knowledge would be difficult and time consuming. Therefore, data validation during user testing before any public global launch is an important step to ensure data accuracy. Having users involved in the development process will also allow them to feel more involved and better voice their needs and possible issues that can be addressed early which could lead to better reception for the created product.

During the development there were two different main tests held with feedback collected in structured manner. The first alpha test had a working version of the 360 view product made based on the previous inputs collected from AM interviews. During this alpha test co-creative session was held to design UI elements and features after a structured interview. The closed beta test was then had using the previous test's findings to collect more detailed and finishing feedback and validation as the next step will be achieving the minimum viable product prior to the planned global launch.

The closed beta test was done as survey and was designed to include respondents with prior involvement in the 360 view development process as it was scalable, did not require complex scheduling, and generated clear and comparable feedback. For the beta test the account managers from the original feature scoping and then interview alpha test were invited to test the new version and fill the survey. Most were available and willing to offer feedback though vacation time and customer work prevented some responses during the two week data collection period. The central team developing other

key account management projects, which this thesis is tied to, was also included as they will determine the future ways of working and have valuable insights. Finally, a representative from parts delivery process that had been consulted during the development was included to give feedback to balance the account manager and sales leaning focus of this tool version. An evaluation was made to highlight the viewpoints, biases, and significance of each test group. The survey had 26 questions grouped under eleven headers. The question can be found in the Appendix 1 after References. Likert scale was used to gather most feedback, using a scale from one to five. Likert, or NPS, scale from one to ten was used to gather final overall sentiment. Three open questions for the current tool version, proposed usage, and final free feedback were included. The survey aimed to capture the current ways of working, feedback on the tool version for continued development purposes, and opinions on the future tool implementation.

3.5 Technical design and software

Before the actual development could be started the need for data experts was recognized as developer resources were limited to one thesis worker with no prior experience in actual reporting tool development nor industrial data management and usage. Departmental data reporting team was met after management level communication exchange for a meeting. Scope of the help was limited to providing data importing assistance in form of dataflows and general mentoring though direct involvement in the development was to be kept out of the scope. This was contrasted with the option of using the team to do most the actual development under stated requirements.

The main software used during the development of the Customer 360 view is the Microsoft Power BI and the company's related data management applications. For this purpose, company's enterprise data warehouse (EDW) solution was used to create dataflows to the Power BI. Data sources for that data were CRM Salesforce and SAP ERP (enterprise resource planning) software and master data hold by the company. Besides that, data was also extracted from reports and dashboards already built and used by the

different departments of the company to achieve similar data interpretation logic and mutual standardization when needed. This was achieved by stakeholder meetings and negotiations with data owners as some data sharing friction was encountered causing increases in development time. Careful consideration needed to be taken when designing data refresh schedules to achieve most up to date final product.

In regards the data model and relations made in the Power BI, a variation of the star schema, the snowflake schema was used albeit in a modified manner. In a normal star scheme, there exist one main fact table and multiple dimension tables. The fact table has the basic attributes and keys to connect it to the dimension tables. For example, there could be customer ID key that is used to link the customer to sales dimension table that has transactions with that customer ID key present there. This can be seen in the figure 7 using in an example medical setting.

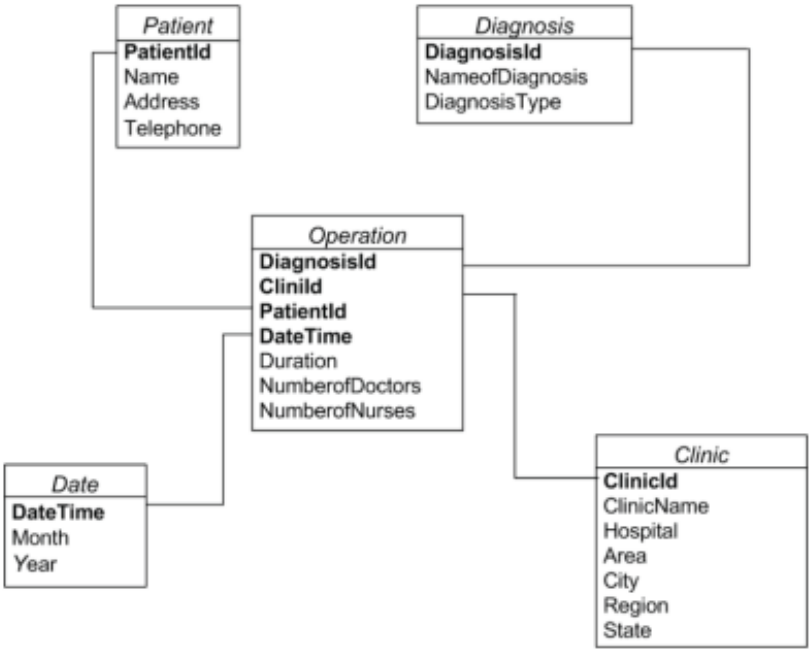

Figure 7. Example of star schema (Garani & Helmer, 2012).

In a snowflake schema there are additional dimension tables that can connect to the first dimension table. An example could be a more detailed sales table that breaks down the

sales to an individual product level. A medical example case can be seen in the figure 8. In this examples the “Operation” table is the fact table while others are dimensional ones.

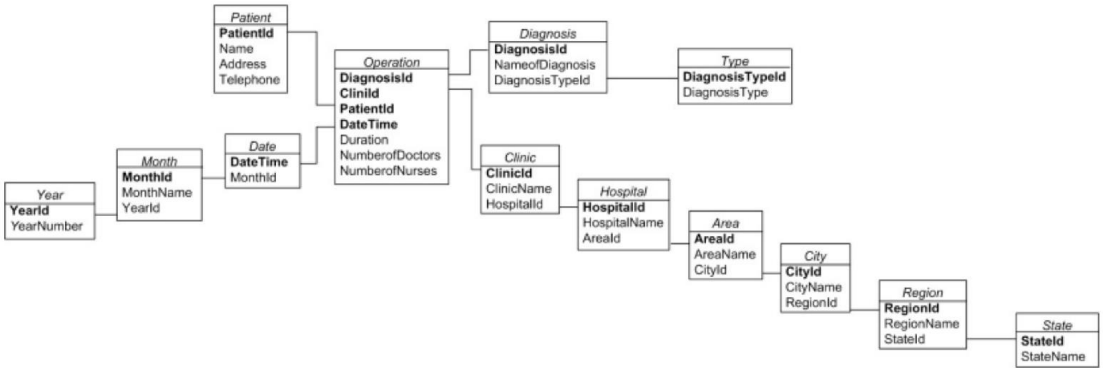

Figure 8. Example of snowflake schema (Garani & Helmer, 2012).

In this thesis, and likely in other complex Power BI reports, it was required to apply more relations besides a simple branching structure as connections were needed to be created between the different branches of the snowflake schema using many-to-many logic. In general, this should not be done as it can cause issues when used and can slow down the model causing lag to the end user. The product was optimized and then tested during development cycles and validated by end-users to ensure fast and error free experience to combat this causing some reworks.

The eventual data model constructed for the 360 view in Power BI was made with the snowflake schema in mind but had to be modified to provide all the necessary features while avoiding duplicate tables. Main problem was building the relationship between the different steps and processes in the spare parts ordering process as in the real world it became clear that some steps can be skipped. For example, customers could directly order something without first requesting a quotation to it, making it impossible to have a clean snowflake schema as every main dimension table had to have connection to the customer and to other main dimension tables. Also, a date table was connected to all tables with dates to ensure expected user experience.

3.6 Limitations

As the thesis is commissioned by a company, data and some sections of the thesis are discussed only in generalized manner due to confidentiality reasons limiting the application of the chosen method. The tool design and functionality are limited by the data sources and by the reporting platform itself, Power BI. No sensitive screenshots or data are used or provided in the thesis although the basic data model and design element ideas will be presented. This is done in sufficient detail to allow new projects in other organizations to learn and plan their own development process for similar use cases or how they could adapt those for their own use. However, as all organizations are different and have their unique circumstances and reporting practices, caution should be followed when attempting to do so. As this is also a thesis work with limited development team of one thesis worker with no prior Power BI development experience nor experience in managing digital product development, another development project will likely have different resource and time allocation. An older but similar project that produced a 360 view for IBM with narrower focus and more limited scope and userbase took over three years to develop (Magee et al., 2016).

The tool testing and different feedback and interviews had some limitations regarding their size and detail. As the company is global and its employees have limited time to dedicate in support of the development process on top of their main duties all of them could not have been heard during the project. The development team also had to allocate limited development time for feedback collection and user testing meaning that sampling was used to gather representative partners for testing. Sampling for the early interviews for feature planning and subsequent user surveys and co-creation was done with the global clustering in mind. The case company has divided its operations into three areas with total of nine subregions and each of the has one or multiple account managers (AM) of which most work with KAC customers. This means that the population size of AMs is around a few dozen. Similar numbers exist for other account team

members. A stratified sampling method was used select the testers and interviewees as each of the populations are quite homogeneous based on early scoping. Recommendations and availability were also taken into account from regional management. In early scoping for the features four account managers were selected as they were already supporting other development projects and interviewed in-depth, each area being represented at least by one interviewee. Similar process was repeated for other interviews, user testing and co-creative meetings.

As the tool development will continue after this thesis by the company, a final version cannot be evaluated here due to time constraints and because the effects of the tool will also take time to materialize into results seen in the customer experience and satisfaction which is monitored on yearly basis, Due these reasons the tool's ultimate effects cannot be validated comprehensively in the scope of this thesis. To address this limitation the tool will be introduced to account teams doing a pilot test to gather feedback and to see its effects for the team performance and how it fits into the current processes. Important step in those pilot test is to gather additional feedback from account members that are not the account manager because their voice has been secondary during the development process. However, the key limitation of this thesis remains that the actual long-term effects of this tool to customer experience meaning that the important KPI, measured NPS, will not be evaluated after the global launch of the Customer 360 view as part of this thesis.

Final evaluation that is part of the thesis saw the tool be introduced to different stakeholders from account managers involved in the development process, parts and field service representative, and sales management experts. Particular focus was on the account manager feedback as that is key to understanding the future useful-ness of the 360 view as the AMs lead and form the teams that will be using the tool. Due to time constraints and the account teams at the moment being not well defined and organized the other account team members will be left out of the scope for this part. Future development will seek to include more feedback from account team members, but this

MVP is made with mostly account managers in mind and their needs to lead the other account team members.

4 Results

In this chapter the integration and development of the Customer 360 view is presented and contrasted to the theoretical framework. Additionally, the current customer relationship management process in a typical B2B manufacturing company aftersales business is presented and how the developed tool and knowledge offered in this thesis could be utilized. Finally, user and stakeholder feedback and comments regarding the tool and proposed process is analysed and improvement areas identified.

4.1 Current process

The current process in the company related to offering and delivering spare parts to customers has limited visibility making it hard to plan and develop each individual part and how those interact with each other. Employees focus on their own tasks and key performance indicators while forgetting the customer centricity and efforts to continuously improve the process flow. In short, the account manager is responsible for the sales process and negotiating prices with the customer and communication while a POC will manage the actual order delivery process and providing the base price for the parts offered. Bottlenecks also exist during the process as the offering can get held back while waiting the identification or processing of some certain requested spare part.

At the case company the key stakeholders or employees affected by this thesis are the account team, their managers, and other employees involved in the spare parts selling process. The most important end users will be the account manager (AM) and parts operations coordinator, also known as POC. While these are the main end-users the other account team members and employees such as the people packaging the delivery and adding that to the data systems need still consideration. However, it could be said that the account manager is doing the customer relationship management and sales work while POC is responsible for providing offers for spare parts and coordinating the process should the customer order the offer, referred to as quotation. Other notable internal

stakeholders are the logistics handling the delivery and technical identification department handling any problems with unclear spare parts request. It is important to understand that the POC is coordinating that processes of multiple departments and not doing the whole process chain themselves. Other support functions also play a critical role keeping everything working as they should be and improving the current methods and tools, such as trying to introduce online ordering services for the customer or updating the prices for each spare parts as they change for multitude of reasons. Depending on the delivery method chosen by the customer the shipment can be delivered by a courier partner of the company or considered delivered by informing the customer that it is ready for pick up at the company logistics centre. Other possible delivery methods or incoterms exists too, and they have effects who holds the responsibility for transportation, risks that could occur, and when those responsibilities change. The number of deliveries, as multiple orders can be combined or does one order need partial delivery, are followed. If the packages are sent onboard planes or other transportation methods are used is also a factor that is being monitored and considered. Those can affect the price and sustainability of the delivery although the choices are usually dictated by the urgency of the customer.

In the company a typical services sale can happen the following way. The customer will need some spare parts, like O-rings, for regular maintenance. They contact the account manager by email, or the account manager could proactively contact the customer contact. In some cases, like recommended maintenance, the need for spare parts can be planned well ahead of time making the process smoother with more time to spend compared to critical breakdown situations. In ideal situation the account manager will make an internal opportunity record to start documenting the sales process and continue negotiating with the customer. After that a request for quotation (RFQ) by the customer about the needed spare parts can sent to the part coordination management coordinator, POC. In many cases, the customer will also have the contact information to directly go to the POC with their RFQ which is common with smaller or urgent requests. After the POC receives the quotation the objective for him is to give an accurate price and time

estimate for getting the spare parts requested. If the customer, is satisfied with the quotation they can make a purchase order during the time the quotation is valid. The company will only start gathering and contacting their own suppliers after receiving the purchase order from the customer. One of the items requested is not in stock at the logistics centre and will have to be sourced from supplier which will take a month. In the meantime, the customer is asked if they prefer to wait for that item or if a partial delivery should be sent. Eventually, the parts are shipped by partner courier and the shipment can be tracked using that courier's third party software on a dedicated portal or case company's online website meant for ordering spare parts and other services such as document sharing and servicing assistance for the customer. Delivery is considered finished once customer offers a proof of delivery. In this hypothetical scenario, the customer noticed that one O-ring was missing and files a claim with the company which will have to be delivered separately, and root cause identified. Figure 9 depicts a simplified spare parts ordering process. In the figure account manager work can be thought as the go connection between the customer and the POC.

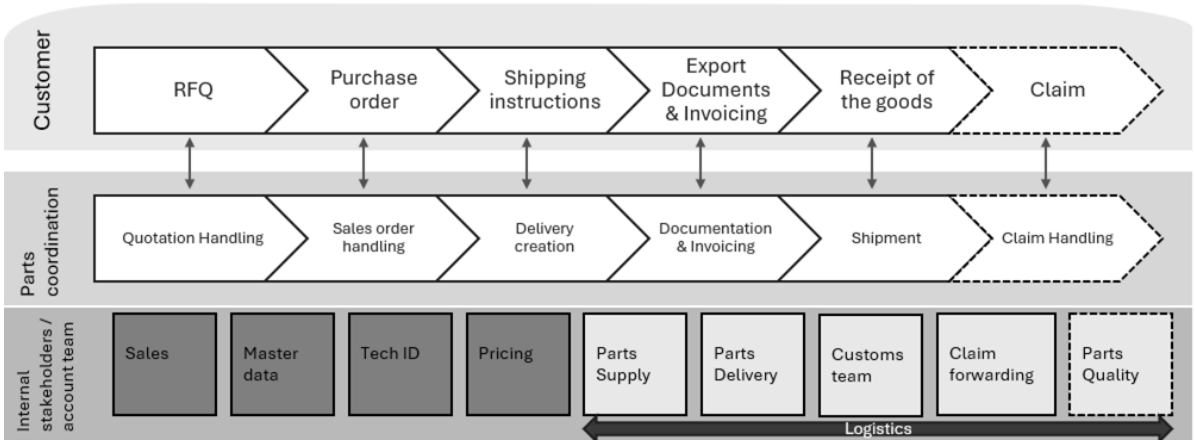

Figure 9. Simplified parts ordering process.

During the step to provide a quotation customer can request codes or send unclear request that are not known. There could be a typing error, or the code might be right but old which means that is not found in the company's current digital systems used in this step. This usually means that the code or requested part will enter the technical

identification process (Tech ID). The Tech ID team will then analyse the requested part and try to find the match while also fixing the issue causing that caused the Tech ID.

During the spare parts ordering process different employees have limited visibility of the current situation and knowledge of the work processes of other employees in different positions. The Customer 360 view will try to introduce a single place and source for all relevant status information and foster cooperation in work process that will increase the communication and mutual understanding of the employee's work processes.

4.1.1 Customer experience management

To improve the customer experience there needs to be understanding of the current situation. The case company has leveraged customer experience management, CEM, for years in form of questionnaires sent to the customer contacts to grasp the overall status of the relationship. The questionnaire is tailored based on the type of customer in the internal customer value categorization, business area, and lifecycle. Additional feedback is also asked after special transactions, such as upgrades to customer's products. Key metrics are highlighted for each department or area and in this thesis the focus is on the services side and overall customer satisfaction. For this purpose, NPS is an important number to follow and is internally considered as a key performance indicator. The CEM feedback questionnaires are sent through email and can be performed by the customer contact with account manager present, though this is rare. Regarding the CEM collection process the account managers main responsibility is to get the customer answer the survey and that the person doing it is qualified and provides valuable and actionable information. Immediate action can be taken to address found issues when needed based on the customer feedback. There is a system in place to flag dissatisfaction to identify the underlying problem. In most key account cases, multiple customer contacts are asked to answer the questions to have more complete understanding of multiple aspects of the customer experience as a director, a buyer, and a technical expert on the ground will

have seen different things and will naturally prioritize their own areas which will direct given feedback. As the account manager is the main person dealing with CEM surveys, the survey findings stay mostly with them. Other internal stakeholders, such as employees involved in serving the customer, could potentially use the customer feedback, especially from customer contacts with feedback related to their activities, to improve customer experience.

Based on the customer feedback of CEM there are key areas of improvement for the company that mirror the internal goals. For services business different spare parts related aspects are voiced in the customer feedback. The different spare part processing times, defect handling, and planning for spare parts are often cited as development areas while expertise and communication are appreciated. Meanwhile, the time to receive responses for spare parts quotations and delivery experience are felt lacking. From the sales point, these activities happen in other departments and often have third parties involved, such as a courier company or a supplier for a particular spare part, meaning that there is limited understanding for this part of customer experience. These factors were considered when developing the Customer 360 view and prioritizing the features in the version delivered as part of this thesis.

4.1.2 Account management and work process

Currently the case company uses third party software to observe and manage the many aspects of dealing with the customer. Most notable of these is Salesforce CRM, from a large US tech company with the same name that it widely used in many industries to manage sales and customer relations and interactions. Salesforce while useful itself, has limitations with its reporting capabilities and access to it is only provided to employees who need it because the licenses to it cost money and access control in need to use basis is a cyber security principle. In the account team only, few members have access to the software, and it could be thought of as account managers' domain. In contrast, SAP ERP software is rarely used by account managers, and they have limited insight to internal processes in detail. Additionally, Salesforce reporting needs the data to be uploaded

there, and the platform makes importing additional data quite challenging. For this reason, using Salesforce for creating the customer 360 view would not have be ideal and other tools, such as MS Power BI, were preferred.

The case company is pursuing more key account focusing target position. The target position has three dimensions: satisfied customers, employee empowerment, and performance enhancement. These are intended to lead better outcomes for the company and customers while simultaneously simplifying and standardizing work for employees. To achieve this data driven approach with a single view of customer needs to be developed. This is the business need for the thesis work. For the aftersales business, the key accounts represent one of the biggest focuses as they make a large part of the overall sales while being only a fraction of the entire customer base. Important factor seen in key customers is their loyalty for the company when it comes to spare parts and other aftersales services. Customer satisfaction is a big factor in the customer loyalty while bad customer experiences will naturally affect that negatively. Using data to better understand the customer experience and their pain points, especially reoccurring ones, will be useful for the company. By also visualizing the customer and their behaviour, it becomes possible to have more predictive metrics and see trends happening with that individual customer. Ultimate goal for services business is locking the customer with an agreement as that will offer mutual benefits and often demands exclusive and predictable sales (Durugbo, 2020). In general subscription like offerings are nowadays preferred over irregular transactions, which especially seen in business-to-customer companies (Chen, 2024). 360 view can help account managers to identify suitable agreement creation opportunities.

With modern predictive technology more advanced data-analysis options can also be added if needed as such capabilities develop. Integration for example reports that take the product reported usage, running hours, can approximate and recommend sales opportunities such as maintenance and upgrades. Rather than duplicating work already done it would be advisable to identify and integrate such tools to the Customer 360 view.

At the moment, such customer centric reporting is under development, and those reports are limited to individual departments with focus often on more customer portfolio level view.

Compared to the literature about teams and groups, it could be said that the so-called account teams in the case company are closer to “account groups”, meaning that they do quite limited and infrequent cooperation while having their individual responsibilities without any major collective goals (Zoltan & Vancea, 2015). The case company has sought to establish key account management practices for multiple years already. For this purpose, documents, and work steps have been mandated from the employees, mainly key account managers. Account managers are instructed to assemble an account team and extract insight from the account team members. This information could then be used to plan actions in advance and utilize the understanding to address issues invisible to the account manager. Additionally, an account plan is made at the start of the year to map out future needs of the account with possible opportunities in mind. The plan should be revised during the account team meeting that happen on a monthly basis with core members and quarterly with the whole team with other possible agenda items. Account plan tasks can also be created and followed in the digital customer relationship management software. Access to that software is mainly limited to the account manager while the other account team members are currently unable to see those tasks. The plan needs also to be reviewed by account managers’ superior and be approved. The superior evaluates and can provide feedback regarding the plan. The status of the account plans is a KPI that is followed by regional level and is requirement for all key account customers in the case company as part of KAM practises.

Members of the core account team are employees from different departments with titles such as sales support, proposal engineer, field service coordinator, and business development manager. Other employees that could be also included have titles such as director or general manager as an account sponsor, project manager, technical expert, and warranty manager but they are not part of the regular meetings normally.

During the regular account team meetings, it is expected that at least few key steps are done. For key accounts, the case company recommends following steps as described here. The meetings should start by reviewing the memorandum from the previous meeting and closing it. The account plan can also be reviewed with the team from the digital CRM tool. Any changes with the customer or team's understanding of it that require updating are handled. Next the customer relationship is reviewed. For example, the customer contact information is kept up to date and any feedback, visits, or notable transactions are discussed. Following that an overall plan to contact and visit the customer can be made. Account objectives can be reviewed, such as strategies, sales potential, and key initiative. Upselling opportunities can be identified. Sales and likely future sales are referenced to the targets set from management and how to achieve them. Individual tasks for members are created and managed related to the customer. Other things that can be discussed could include ongoing deliveries, safety situation, possible risks, and warranty issues. The next steps and meeting are agreed, and the account meeting can be closed.

The global implementation of the centrally mandated key account management practices is still uncertain as it is hard to monitor. The case company has recently launched a project to investigation on the actual key account teamwork, and the early findings indicate that the actual teamwork is not achieving its full potential. In some cases, prior to the investigation there was limited evidence there being any actual account team activity and team members were not aware of being in a team. This would suggest that the global reality of KAM implementation is not following the guidelines set but focusing on doing the tasks that are followed and monitored to achieve the KPIs. By focusing on fulfilling the KPI requirements for submitting account plans the account teams currently are inefficient in generating insights and added value to the KAC customer or the company from the account team meetings, should the reality match the limited observations investigated by the company. While creating an account plan and having an account manager plan action, organize and document ideas about the customer, can be useful,

that is not enough for it to be cooperative account team activity and extract the full associated benefits from it.

To address the situation, the company launched projects in the key account management program to which this thesis also contributes. Relevantly to this thesis, the new pilot projects were launched to support the forming of actually functioning account teams dealing with key accounts. At the same time, those pilot projects that receive support from central department will allow learnings to be made on how to manage wider implementation KAM practices and account teams in the case company. A pressing need was recognized for a single view of customer as the team members and customer information were dispersed across multiple departments with limited communication and data sharing. Thus, the idea to create a customer 360 view was found inside the existing literature and expertise in the professional business field. Integrating data driven performance management and customer centricity were also recognized to be good additions to the company's decision to reform its key account management practices.

4.2 Development of Customer 360 view

The development of Customer 360 view during this thesis was largely explorative and iterative process as those are still quite uncommon in complicated B2B industries while finding information about them that is allowed outside of those companies is even more unusual. The case company had many reports with option to filter views and tables but those were still designed to be used in customer portfolio level and were limited in their function.

4.2.1 Scoping and planning

The scope of the tool was decided based on the limitations and the need prioritization of the company and the resources afforded to the development. Secondary limiting factor was development time and need to have it ready for other related project and pilot

tests. Company's aftersales services sales development team has been working with various employees and different departments and has solid understanding of company processes and possible development areas. The business unit that the team operates has decided to launch a focused development program for more customer centric operation with special attention to key accounts, the high importance customers. To achieve this target position various project has been launched and planned. This thesis is supporting the overall target position and will supplement other projects strengthening key account management and team performance.

Microsoft Power BI was chosen as a platform for the report and dashboard for couple key reason. Power BI is powerful and modern business intelligence platform which is receiving regular updates with strong user securing it continued maintenance and development. It is able to import data from many sources as works well within the wider Microsoft Office environment. In addition, the case company also has established Power BI reporting and employees with expertise in Power BI allowing easier access to support and integration. The company is also moving to centralize most of its reporting in Power BI as older reporting platforms are being retired due to age and more streamlined operation. As reporting platform, Power BI's strengths are its interactive visuals, easy access with low costs, and relatively easy developer experience that can seem familiar to users of other Microsoft products.

The development had a clear goal and vision to deliver a functional and useful tool to possibly used daily by hundreds of global users effecting their actions with internal stakeholders and customers. This means that the tool and planned actions need to think not only the user but how they will choose to act with the used information all the way to how the customer or other employees will be affected and receive benefits. In the early phase of development, a mindset of agile and lean was adopted as the core principles guiding it. This meant in practice user centricity, iterative development and embracing changing needs. The goal of the first global release would not be to have the perfect and

final product but a useful tool with framework to add more needed functionalities, a minimum viable product (MVB).

4.2.2 Feature finding and design

During the early phase of development interviews were had with selected account managers to establish their needs to map features for minimum viable product. The meetings were recorded and transcribed using tools common in the industry, mainly Microsoft Teams and its features, and summarized using CoPilot AI tool. It became clear that there existed a need to have reporting platform with extensive features. The findings from interview data were listed in couple different platforms, most notably in Miro to create a needed feature board. Miro was also used during the interviews to cocreate ideas together with interviewees should they have had prior experience using it. Based on the analysis of the co-created ideas, a MoSCoW board was created from the account manager feedback, seen in figure 9, and a similar more detailed feature table in Excel to identify potential data sources to extract the needed data to fulfil them. It was found that all account managers shared the need to have better visibility and detailed view into the parts delivery process. The proper delivery phase with its possible partial and redeliveries after a deviation were especially requested. Payment and invoice details and statuses were also of great interest as those aspects are monitored by the account managers after not being involved in the process for a while. At the moment the tools to monitor the invoices was felt lacking. Additional feature requested was the ability to see the lead times or the times needed between different internal steps to better spot possible improvement areas. Other notable feature list was the ability to have much of the account managers own work shown in the 360 view to be able to share it with the rest of the account team. The account manager wish list was then reviewed and refined into a more detailed planned feature board on the scope of the first release intended to be achieved during this thesis. These planned features were then investigated further with relevant stakeholders to identify key data points to achieve a minimum viable product.

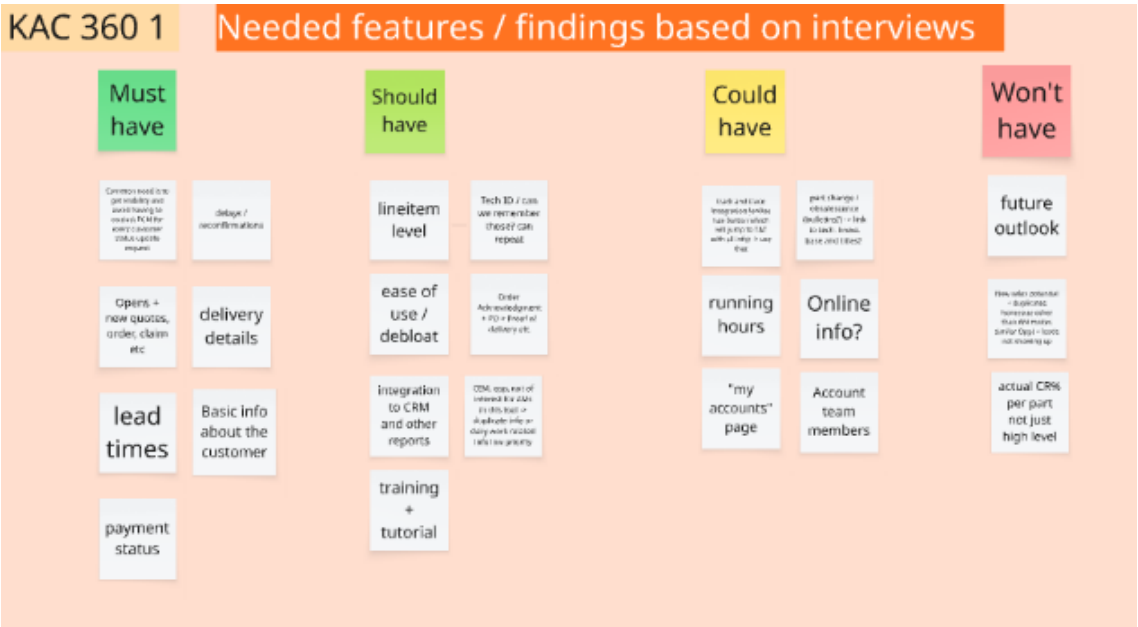

Figure 10. Needed features summarized and ranked from AM interviews.

Figure 10 represents the features needed based on the first round of account manager interviews and have been assigned to four different categories: must have, should have, could have, won't have, making it a MoSCoW board. MoSCoW method can be used to identify delivery prioritize for features and is useful for getting the best return at the moment during the development. Must have items need to be in the version that is develop while won't have aspects can be implemented in future but will be excluded from current development scope. The categories for different ideas and features were chosen based on the need of the account managers, development capability, and prior requirements that the features need. For example, predicative or future outlook is difficult to deliver without first having a solid framework and clear understanding of the current situation.

The account manager feature board was considered to be too account manager focused and other stakeholders were heard and given a chance to comment on them. The result was the final development board with also additional feature needs, seen in the figure 11. Importantly the most critical needs, payment, delivery, and lead times, were broken

down into more manageable and detailed format that could be found in the company's data sources.

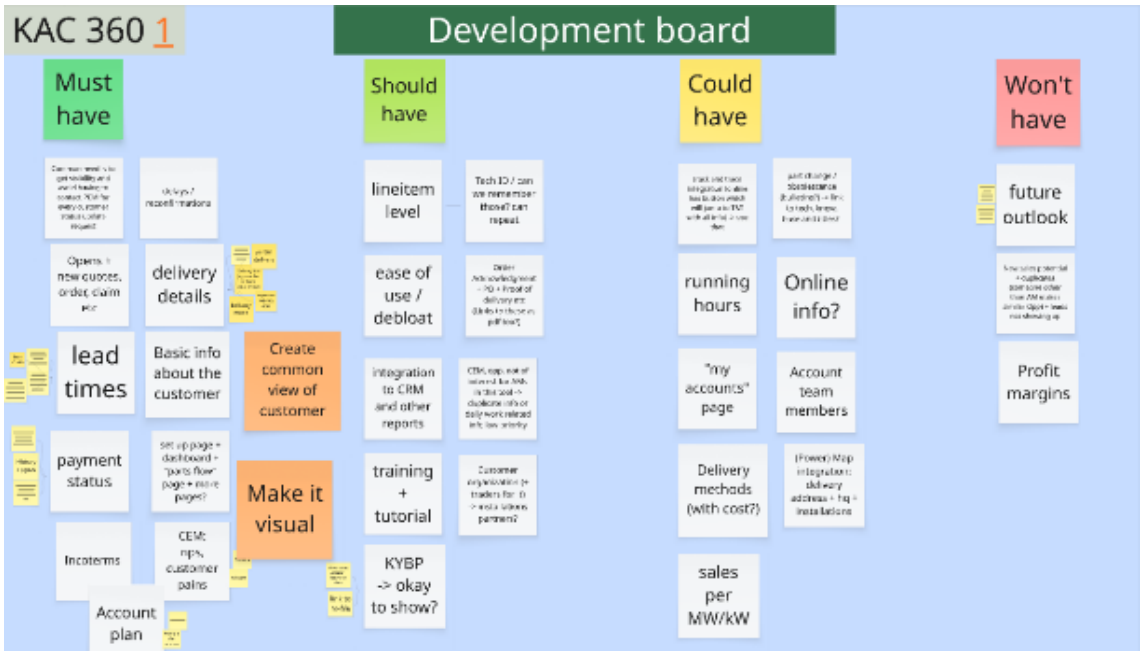

Figure 11. MoSCoW board of features chosen for development.

The various features in were then listed in table format and given better description and reason and idea originator, focusing on the ideas on the must have category to achieve the minimum viable product. After this the planned features were categorized into feature groups, and given a priority number, ranging from one to five, and estimated difficulty, also ranging from one to five though the difficulty estimation could be revised when needed. This allowed development planning to consider returns on effort and track the progress of the development. After this, data sources for them were explored and identified. Data sources were also grouped up to find possible ways to merge data queries and sources as redundant and multiple queries will make the data model bigger and more complex while leading to likely worse user experience and inefficient and not lean digital product. Features were re-evaluated after end-user test to see if they had been achieved for sufficient level for minimum viable product and what steps needed to be taken to achieve that. At the same time this limited "feature creep" and kept the

development work focused and its scope in the frame that was agreed and aimed at during the start of the project.

Based on the understanding of the development team, the account managers lacked visibility to various steps affecting customer experience. This was validated during the first round of account manager interviews. One of the most common and important part of this is the spare part delivery process. As the account manager is mainly involved in the sales activity and customer relationship management, they are not involved in internal processes actually dealing with the various steps that happen between a customer asks for an offer and ultimately gets the order. Common problem mentioned by most interviewed account managers during the early scoping round was the visibility of the delivery process and other internal steps in the ordering journey for the customer. Often cited complaint were delays, also known as reconfirmations, during the delivery process. What was more pressing than the existence of those delays was that there were no information flow coming to the account managers about the possible delays. In some cases, the customer was the first one to ask about the delay, putting the account manager in a tough position. One of the perceived benefits of increased visibility was the idea of being able to proactively see such delays and then inform the customer, thus lessening the impact or possible negative ramifications of them for both the customer, the company, and their relations.

Other main driver for account manager engagement was the related account team project which helped to drive engagement and interest in account managers. In the project the account teams will be more fixed and have regular monthly meetings with standard structure for key customers. The account team's cooperation will be strengthened and more meetings regarding a customer would be hold by the teams regularly. Perceived benefit of the tool related to this was to offer a quick but comprehensive glance about the customer to all participants in single place which is accessible to all. The tool will also allow members of the account team to get familiar with the responsibilities of the other members and their work processes while also being able to check the progress of

task or internal actions when they wish. This means that the need to send emails or messages and then using time waiting a reply will decrease. All parties can thus be more informed and communicate more accurately when needed. Other proposed benefit is to see the upstream activity allowing employees to identify incoming workload and time it could likely take given the past history and performance with that customer.

4.2.3 Power BI development and data management

For a user a Power BI report appears to be mostly visuals and tables but to a developer most of the work is hidden. This can be working with data, transforming it, building a data model but even more crucial step is to identify and get the data needed. An end-user giving their opinion will not be able to tell a developer in most cases where they can find a data source for a given requirement which means that developer will need to find a suitable source themselves or find an expert or contact person to discuss and present one. Even if feature requester can, there is no guarantee that is the most optimal source or solution. Data source could be using some other report as its basis or be updated infrequently or belong to some other organizational entity which will be often the case like with this project as cross-functional and departmental knowledge sharing was the key target for the Customer 360 view.

I thought that a company would try to utilize the data that they have cooperatively to improve their processes but especially sharing it becomes complicated as most digital services and accesses are managed by need-to-know basis, following often regional and departmental lines. This can lead to fractured mosaic of overwhelming amounts of different reports and that might be managed or not. It is not uncommon to find duplicates and work that could have been made simpler and faster by utilizing existing reports. Therefore, one issues this thesis and its main deliverable aims to address is the practice of using multiple reports and making them more integrated and easier to navigate using one central source.

When encountering a data ownership issues the following process was followed. Contact person should be identified for that information, a good starting point to find one could be the person who uses the data source or has developed it. Sometimes the ownership is clear in good documentation, but this is not always the case. After contacting the right person, the project goals and need for data should be shared and marketed. In best cases, one or more people on the “opposing” side would be convinced about the data sharing and work towards that. Reasons not to share data are many though sometimes not all of them are valid. Data often has some individual or collective significance related to performance leading to fears of negative effects for employees in it. Importing data is often thought to have ill-effects to load times and usability of existing reporting tools. Finally, cooperation often means more additional work for data owners.

For a functional product utilizing data, data availability is crucial for innovation (Zambetti et al., 2023). During the development some obstacles accessing data was encountered when data was managed by other internal stakeholders. It was found that addressing data ownership concerns could be approached in three keyways: namely agreeing, escalating, and avoidance. Avoidance means going around the data ownership issue by locating another data source to replace the one causing problems, or as data in report usually comes from master data or similarly concentrated transactional data, usually from SAP, it could be extracted directly from there. However, this method lacks any processing done in reports that could be critical. A calculation or logic to check the status of a step or if its progress is performing well could be complicated and follow internal guidelines of that department. Creating conflicting performance indicators and metrics, such as lead times, is something to be avoided. In those cases, the data needs to be extracted in another way.

Related issue is limiting data visibility and access management. It is standard practice for the company that the regional data is shown to only employees who need it on that regional area. This means that only employees in certain region can see only their own data while not being able to see data from other regions, such as sales data. The

company must also follow data protection regulations, such as GDPR. This is especially important when dealing with more sensitive information. Management often has higher level data access to monitor performance. This also stops other employees or possible cyber threats from getting an easier access to confidential information as data contains personal and performance data that could have effects to individuals or the company should the data be misused in some way. For this reason, organizational access limitations are placed on row level data in reporting tools that can also be added in Power BI. Data sources with built organizational access limiting capabilities were used, when possible, which were validated during testing phases by early users from different departments.

The company collects all kinds of data about customers, internal operation, sales, and suppliers. Most of that data is then moved after some steps to enterprise data warehouse (EDW), where it can be extracted to be used in reporting tools or other information systems. Many systems input and output data too, like CRM which can query data from SAP ERP through EDW and then also input data like sales opportunities that are handled by it. From EDW data can be used for analysis and brought into platforms like Power BI. A simplified theoretical data framework used in this thesis can be seen in figure 12. Using centralized EDW has some notable advantages, namely it “provides a governed environment where information from disparate systems is integrated, standardized and made accessible for consistent reporting and analysis” (Databricks, 2026). It acts as a single source of truth for a company and can be used more easily for machine learning and artificial intelligence training purposes (Databricks, 2026).

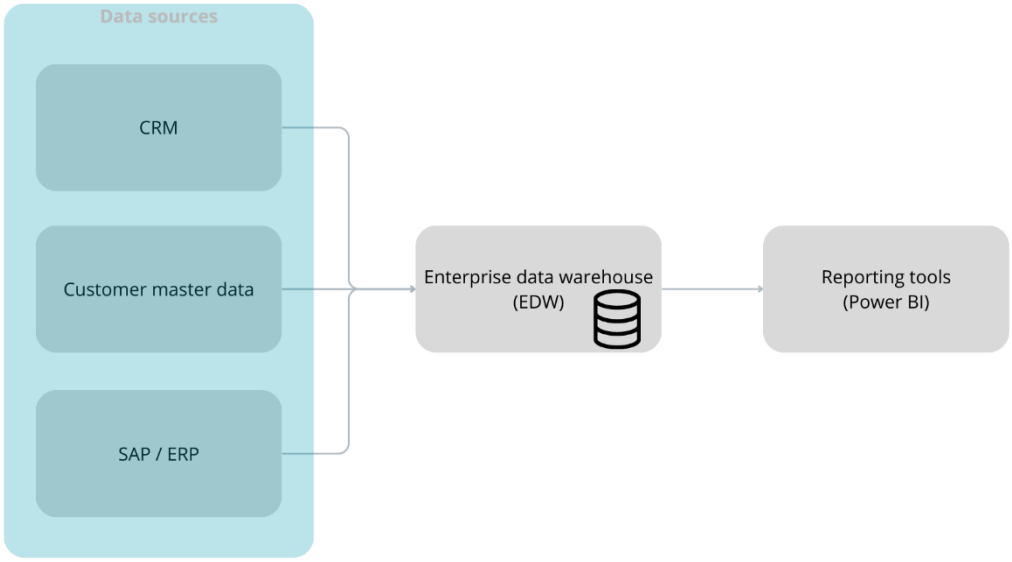

Figure 12. Simplified data framework used in the thesis.

In figure 13. actual used data lineage can be seen in detail. Unlike in the theoretical model, some basic data was imported directly from Salesforce CRM as that proved to be easier to manage and modify. Some of the data in Salesforce CRM is also not entered into EDW when it mainly concerns sales and marketing with the customer. This led to the creation of a direct Salesforce data importation to the Power BI reporting platform. As a result of the development process, good practices were followed to ensure that data updates worked. Usually, EDW refreshes nightly or some set interval and in the case company there were two daily updates before and after the working days of Finland, as most office work and data usage happens there. The Customer 360 view was set to update after those data refreshes to get the newest possible data allowed by the company's data storage limitations.

Figure 13. Actual data lineage and EDW relation.

Some data in EDW was considered by the end-users to be unclear as it was using acronyms and codes. To solve this need employees familiar with those topics were consulted to make auxiliary help tables to explain those terms which were then added to the flow using cloud storage, SharePoint. EDW data and Power BI functionality were configured in way to follow the organizational data security and ownership rules as tables' row-level access was limited to employees to only have access to their own regions. The company follows the practice of providing data and information only on need-to-know basis.

In the figure 14 the data or semantic model used in the Power BI is shown. It shows the connection between the tables centring around the customer-owned product table. The company chooses to use their main product (in the figure 14. as table "Installation") as the main element in reporting as aftersales operation centre around servicing the product as customer buying practices sometimes are indirect, for example a customer could use third party to procure spare parts, or the owner and day-to-day operator of the product, installation, could be different legal entities.

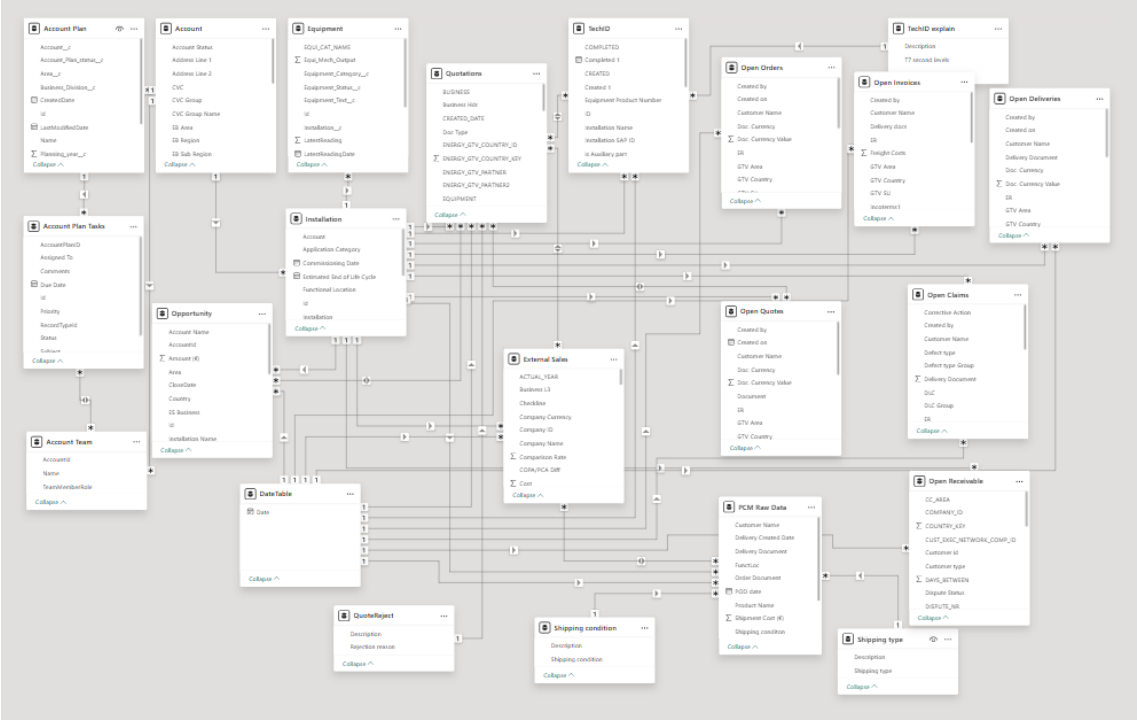

Figure 14. Data model in Power BI.

Developing the data model in Power BI the development aimed to follow the star schema, or its variation snowflake schema. The basic design calls for one main fact table and multiple dimension tables. The fact table contains some basic attributes and keys that are used to connect it to the dimension tables. For example, there could be customer id key that is used to connect to account plan dimension table that has that same key to tie the information of that table to that specific customer. However, due to the complexity of the needs of the company and its processes it was impossible to cleanly create a pure snowflake schema as the relationship between the different dimensions tables were also of interest. Not all offers given to the customers led to sales while not all sales had formal offer made, while both could have been linked to special sales opportunities that the company also records. This led to complex filtering logic which increased the development time and is generally to be avoided.

First functioning 360 view was entered into rapid testing and iteration. In the alpha test five account managers were contacted for an interview from different global areas to

give feedback of the development status and features needed for the MVP. Pre-prepared questions and access to the Customer 360 view were sent prior to the interviews to give time for the interviewees to explore the report themselves. Instructions on how to use it and its functions were kept minimal to extract usability feedback. The Power BI was not daily and familiar platform for the testers prior to the test. Interviews were digital and besides developer questions, users shared their experience and ideas about the different possible views for the report. Main limitations of the first test were its limited size and exclusion of other account team members. The goal was rather to design the next test to be closer to the minimum viable product that would be then validated and used in the intended manner after addressing the issues surfaced on that second round of testing, the beta test.

The first finding of alpha tests was the clear need to have clear and visual instructions or a guidebook for using the 360 view and setting it up. The concept of account level reporting was hard to fully adopt as most reporting is on portfolio level. Users were able to select themselves to limit their view to their accounts, but proper tool usage did not arise naturally with current user interface. Having too competing navigation possibilities, one native “page pane” on Power BI and one embedded in the report itself was felt confusing leaving sometimes pages unseen. A central and categorized navigation hub for the page structure was requested, and some user interface scaling issues were identified between different screen resolutions and zoom levels. A few bugs and glitches were identified, like having a historical sales graph supposing to show euros but sometimes showing sales with wrong currency numbers without converting it, or issues with customers having multiple possible duplicate accounts in the case company’s information systems, or the used sources having only historical data or only open transactions. All the issues were categorized, evaluated, and documented to a table.

Despite the ongoing development and features still under construction the interviewees had positive outlook and sentiment on the usability of the tool and were eager to receive a new version for early adoption. The overall design and look combined with the

information centralization, visualizations, and visibility of new data were expressed as positive aspects of the Customer 360 view for the account mangers own work process. Interactivity of the visuals on Power BI platform after some practice was also received well. Compared to the usual digital tools that the account managers work with the visualizations and increased development flexibility are better in Power BI. All the interviewees thought that the 360 view will be useful once finished and would likely offer added value to their own work although as an internal project it is quite common to give positive feedback and not to openly resist projects inside a company. Even then the risk of biased feedback can be considered small as the account managers understood that they had a vested interest in making their future tool functional and purpose-built for their own needs.

In the figure 15 the different main iterations during the development can be seen starting from the first raw interview feature needs (1) to mock-ups (3) and finally to the latest version (5) included in the scope of this thesis. The figure 15 is only showing the main overview page in the actual Power BI versions, namely the images 4 and 5.

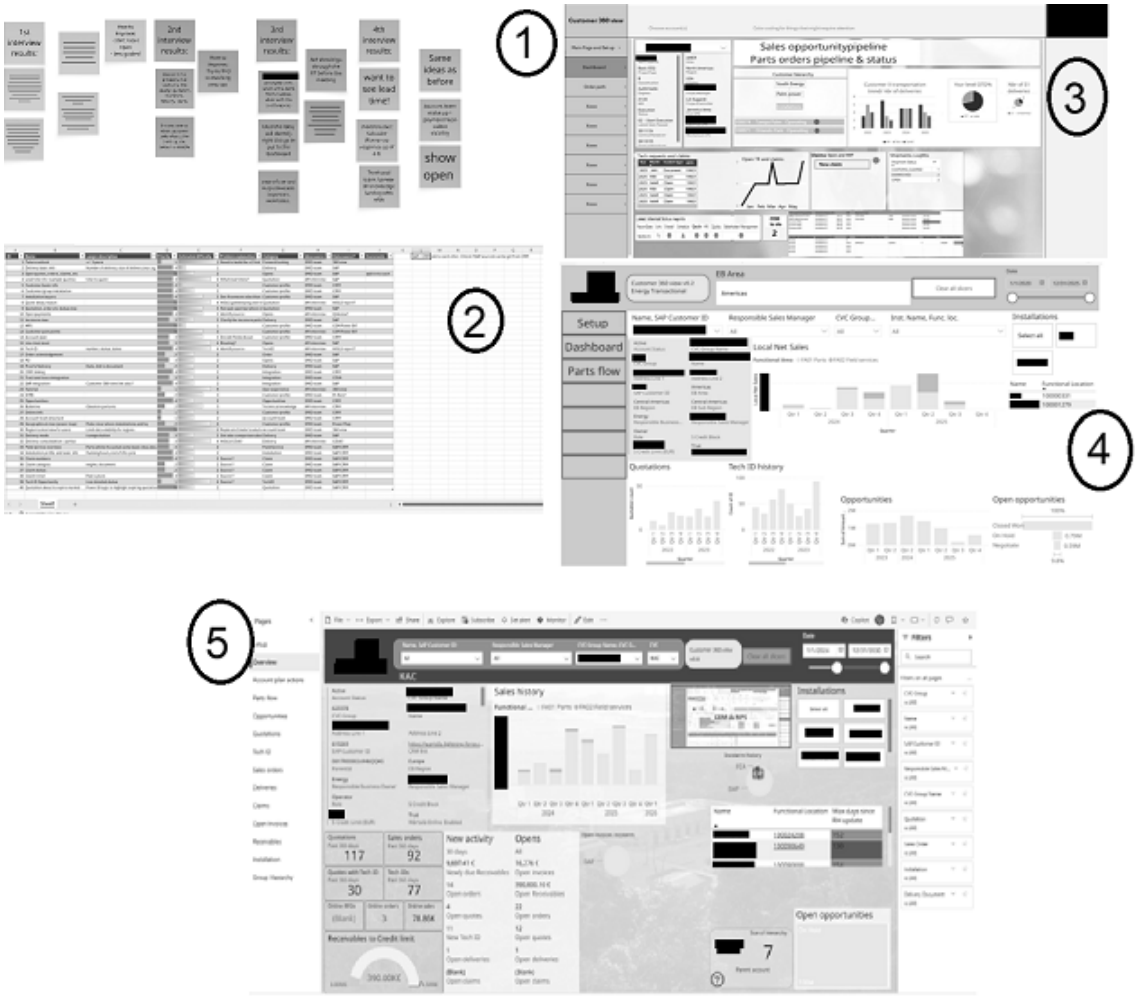

Figure 15. Dashboard development from idea and mock-ups to beta version.

4.2.4 Power BI beta testing and feedback

In table 1. the different tester groups for the closed beta test are analysed akin to SWOT-analysis. The reasons for including the group in the test, their value for the feedback and possible risks or underlaying factors effecting it are shown. The closed beta tester categories were account managers, sales management and development (SMD), and parts and Field service representative (Parts expert). The account managers provide the most important information for the actual use cases for the 360 view and what is the current reality of the day-to-day activities while the central SMD feedback provides some strategic vision how they aim to guide the future ways of working. Parts expert was heard to

validate the delivery flow details and standardize the used language and internal codes with POC-like insights to balance the heavy sales lean present in the testers.

Table 1. Tester group evaluation.

Tester group	Account manager	Sales management and development	Parts and Field service representative
Feedback numbers / testers	5	7	1
Reason for inclusion	Main future end user, feature development	Relevancy to other projects in KAM program, UI / UX	Data and term validation, early POC understanding
Power BI familiarity	Low to medium	Medium to high	High
Risks	Varying level of data analysis knowledge, over focusing on AM needs	Not involved in day-to-day operation, new top-down mandate	Focus on own process detail, added complexity and no account team background
Tool effect / Priority	High	Low	Medium

The overall feedback gained from the various tester groups was very positive towards the current product and the future development. The need for this thesis and its deliverable, the Customer 360 view, was also reinforced as all users agreed that it would help to answer the points raised in the research question and sub-questions, as seen in figure 16.

Figure 16. Research question related sentiment.

Noticeable divergence in results between different groups were mainly seen in the current state of account teamwork where account managers reported that the account teams have well enough working status at the moment, seen in table 2 and figure 17. On the other hand, account managers also stated that they would benefit from increased account team collaboration, data visibility, and the use of data driven decision making. This could be seen to conflict with the prior results seen in the figure 16 or that the account managers had a bias to answer positively to this survey or at least questions regarding their own work responsibilities.

Figure 17. Current account team state survey results.

The SMD team's responses could lean towards the need to have better KAM and account team practices because they are trying to develop them at the moment. From the survey results it is clear that different views exist between the central management and the account managers. This could indicate that there will be change resistance when actually implementing changes in the way of working and that the 360 view's actual usage might not be what was originally designed.

Table 2. All beta test survey Likert results.

Question	Likert (1-5) Account manager	Parts expert	SMD	Total
How well does the account team understand customer service level today?	4.2	3.0	2.9	3.4
How well are we using data to identify customer current pain points pro-actively?	4.0	2.0	2.0	2.8
How well account team has a common visibility for customer challenges and pain points?	4.6	3.0	2.7	3.5
How well does an account team see the whole customer journey and experience?	4.0	2.0	2.4	3.0
How well the account team members understand and see progress of each other´s tasks?	4.0	2.0	2.0	2.8
We should do more data driven decisions	4.6	4.0	4.3	4.4
We measure individual customer performance well	4.4	3.0	3.1	3.6
Account team members collaboration could be strengthened	5.0	5.0	4.6	4.8
My work would benefit from more customer data visibility / transparency	4.4	4.0	4.4	4.4
Account team is having a shared vision of customer success and our service level	4.4	3.0	3.1	3.6
Account team is able to easily see and follow-up 5d tasks today	4.0	3.0	2.6	3.2
Do you agree that 360 view or tools like it are needed to achieve modern data driven customer success?	4.8	5.0	4.6	4.7
Having the 360 view as a common customer data source and meeting/account management tool will help to achieve the account team goals	4.8	4.0	4.3	4.5
The 360 view will help to utilize the data better to improve the customer experience	4.8	4.0	4.3	4.5
Customer 360 view is visually appealing	5.0	3.0	3.3	3.9
The information presented is clear and used terms are explained	4.8	3.0	3.7	4.1
It provides me relevant information	4.8	3.0	4.1	4.3
It is easy to use the dashboard/tool	4.8	4.0	4.0	4.3
I need instructions / training on how to use it	3.8	3.0	2.9	3.2
Data shown seems accurate	4.8	4.0	3.6	4.1
Links to other data sources (e.g. CRM) work and can be spotted easily	5.0	4.0	3.4	4.1
Based on your user testing, what is your overall rating for the Customer 360 view as a customer relationship and account team management tool?	4.4	3.0	4.0	4.1
Will the Customer 360 view bring value to you in helping to manage and improve the customer relationship & satisfaction?	8.6	6.0	8.3	8.2

According to the survey results, all tester groups felt that Customer 360 view will bring value towards improving customer satisfaction. Note that a Likert scale 1-10 was used for this question and if used as a net promoter score (NPS) it would have the value of 39 which, while positive, shows that there are areas to developed. This is reasonable now as the 360 view is still under iterative development and is yet to be launched. It should also be noted that the parts expert is more neutral towards the current version of the 360 view, which could indicate that the current version is too heavily focused on the account manager wishes and sales aspects of the customer journey. Future developments should include more POC and other account team member input to achieve tools intended goal of facilitating better key account team performance and collaboration.

4.3 Suggested process

With the tool and suggested work process this thesis aims to deliver better customer experience for better business performance outcomes with data driven insights. The Customer 360 view will offer a framework for holding regular meetings as it can be designed to cover the meeting topics besides working as a data sharing platform. In practice the global virtual team with account manager as the informal leader would share the report while other members would see AM's screen and have their own programs and 360 view open.

Single view of customer or customer 360 view is meant to offer one holistic and shared data profile of the customer consolidating its behaviour, transactions, interactions with them (Kirvan & Hanna, 2024). In the figure 18 the data and information inputs to the customer 360 view and its usage for accounts teams is presented. On the dashboard, or overview page, the important KPIs and visuals to provide the basic customer information and alert the user of any activities requiring their attention on other pages. Information is imported from databases (DBMS), other commonly used reports, and systems, like CRM, to get additional detail or follow-up tasks are linked to the 360 view. Colours

highlight relevant or action requiring details, like the need updating running hours of the product used by the customer. Data driven insights can be made based on the report and used to make business decisions or evaluate their success. For example, the reasons for spare parts identification problems are categorized and AM can investigate why the customer sends outdated part codes rather than new ones causing delays.

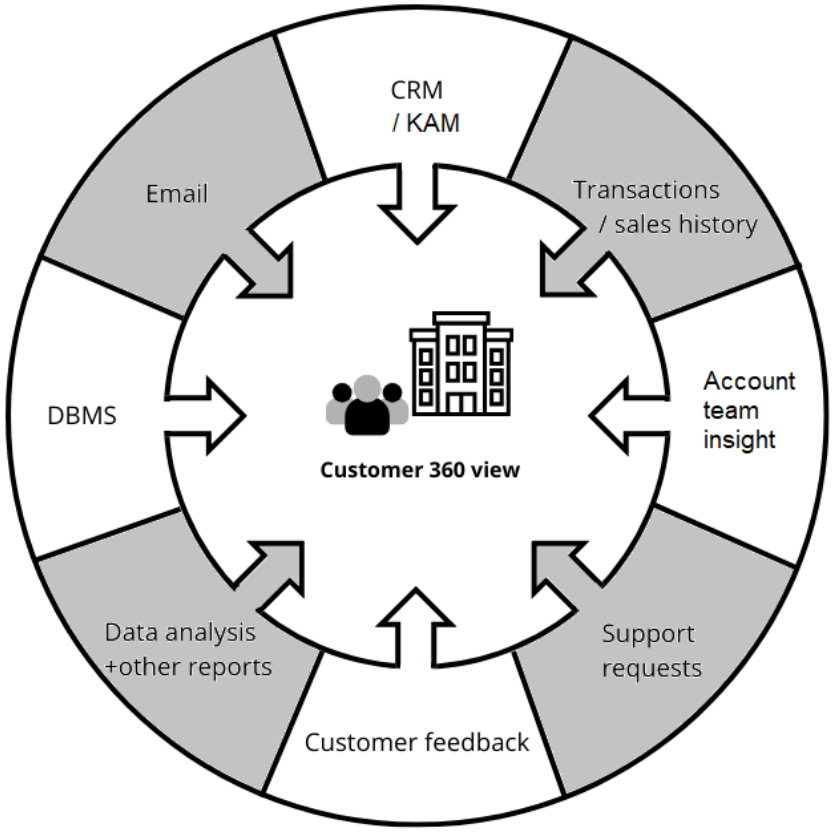

Figure 18. Customer 360 view proposed for the company.

For the case company this means that they should implement a cross-functional dashboard or a reporting tool that has wide amount of information to have a quick overview of the customer's situation with a possibility to see more detailed information based on the findings of that dashboard. That means that the information presented should offer actionable insights and guide the user to do those actions in the right system or find a person to contact to do so. It should be noted that the dashboard should be easy to use for actors of different information systems knowledge and that the many end-users

actually have access to it rather than limit access. While the digital 360 view is a good starting point, it is not the whole single view of customer. Proper customer 360 view is an understanding and thus uses other knowledge and systems available to the user as well. Likely informal information about the customer and the processes will be exchanged during account team meetings and using the report as the catalyst to generate those discussions is the intended outcome.

The Customer 360 view is theoretically intended to combine the KAM practices and lessons from global virtual teams to provide a single source of truth and shared customer relationship management platform (Kihn & Lin, 2024). The theoretical findings and cases from literature suggests that the account teams should be working more closely than they are now. In the case company there are reasons to believe that account teams work in manner more indicative of work groups with possibilities to improve. For this reason, the key account management practices should be better followed and time for actual teamwork and sessions dedicated where the account performance and its management discussed in open format rather than doing the minimal required steps to fulfil demands on paper from central management. The account teams should be given the time to self-organize and manage themselves to achieve their intended purpose with sufficient motivation and trust creation opportunities. Other major step is to start leading and developing the business relationship and internal process with data driven decision-making.

Teams that build trust communicate often and should meet the other members as individuals to build personal connections. Choosing people and leaders suitable for team environments, especially in virtual environment is requirement for success. Otherwise even extroverted and natural leader that is uncomfortable with leading without traditional human contact can fail to inspire cohesion. The informal team leader, account manager, is the most crucial factor in the team's success. Making sure that the account manager has the support they need and the time and resources to lead the team is necessary for any functional account team. The members of the team should also be able to feel comfortable communicating so the used working language proficiency should be

considered. The lower the barrier for contacting other team members the more frictionless the cooperation will be. While modern AI-powered solution can help with translation and interpretation using them could alienate account team members as they might come across as more distant and less personal. Ideally the team members are somewhat diverse group with strong cultural understanding (Kramer et al., 2017) of each other backgrounds and norms or that will be created early in the team's lifecycle.

One other important factor is conflict avoidance in team members (Jimenez et al., 2017). This does not mean that issues are not raised but that they are dealt professionally and honestly. Rather than hiding or avoiding responsibility an atmosphere where failure is understood and taken as a learning opportunity is preferrable. The way issues are solved and approached matters greatly. Management can try to monitor and foster the following aspects of the team: knowledge and care of other members, openness and amount of communication, consensus building, conflict resolution, and freedom to express ideas. Having physical meetings for planning and teambuilding or additional rewards based on shared results can be away to create team spirit.

The Customer 360 view should be used for account team member task management based on the key account management plan as it offers superior visibility and follow-up capabilities. The strength of the 360 view is that using it avoids the need for introducing new software for this purpose and can seamlessly integrate with current systems and the regular account team meetings. The account team members currently lack the access to CRM Salesforce where the tasks assigned to them are currently located, making them unable to see them there or track changes and updates. As the Customer 360 view extracts the data from there and visualizes them for all users even without access, other team members can see their tasks. Meanwhile the account managers are unable to see themselves how the actual internal steps are progressing, usually in SAP ERP, after they have done their sales work. Using the Power BI built-in dashboard pinning functionality users are also able to create their own personal view from visuals with their selected

filters. This more personal view will offer better end user experience and is also much more accessible on mobile devices compared to the whole report.

Regarding the future development of the Customer 360 view steps must be taken to ensure the continued and timely development as the current outlook does not extend much further than the scope of this thesis. Resources and manpower need to be dedicated to actively pursue the development with iterative mindset as well as support extended for account managers to build actual functioning account teams as suggested by the literature. Higher quality and dependable data sources selected while reporting and data driven decision-making organizational culture promoted alongside departmental cooperation. Closer and more detailed feedback should be collected from all members doing actual account teamwork. Besides these clear additions to the features, like adding full breakdown and analysis of field service, and having more forward-looking features, such as predictions or trends, should be added. Other useful reports or systems should be better tied to the Power BI report to enable truly useful central hub for all the actions and monitoring to harness the data potential in the company. To achieve this success, stories and trainings need to be promoted and made possible while the resources and time allocated for them.

5 Discussion and conclusions

This chapter answers to the research question and presents how the theoretical framework works with the empirical findings. Practical implications from the suggestions part are also summarised and generalized. To finish the thesis future directions for research are suggested and the conclusions made. Thesis demonstrated how to apply DSRM mindset to real company environment together with end-user centric development process that included insights from literature.

Here I tie together past literature and the thesis' empirical part to generate new understanding for the appropriate academic fields. As the thesis was focused heavily on the development of the Customer 360 view, discussion with literature in a more theoretical viewpoint is needed and I will provide answer for the research question. The thesis builds upon fields of data driven decision-making, high performing teams, and customer relationship management. This was done to fully capture all the relevant aspects needed to create a customer 360 view in the B2B account team context.

The thesis' main research question was:

> *RQ: How to use data driven decision-making and performance management practices for increased customer satisfaction?*

And the sub-questions were:

RQ1. How to use data driven decision-making and performance management practices in global virtual team?

RQ2. What are the elements of modern high performing teams in B2B service business?

RQ3. How to manage customer experience in B2B service based on data driven decision making?

After starting to explore the case company practices it was noticed that the company tried to implement much of the performance management practices and was using data to create reports that offered measured KPIs. These KPIs were also monitored regularly, and guidelines were in place that supported customer centric thinking. However, after more careful analysis the actual execution of these practices was only partial and mainly done to satisfy the given requirements and not used to their full potential. Much of the literature focused on different context cases rather than B2B and GVT teamwork was focused on usually on similar position or project like cases.

RQ1. How to use data driven decision-making and performance management practices in global virtual team?

Clear and common platform to manage the work and monitor performance is needed to work effectively in a global virtual team. Tools like 360 view can achieve this but also need buy in and motivation from the team members. As by their nature GVTs use digital tools to do much of their work, the possibility to base the work around data and digital platforms becomes easier. What was found is that collaboration is still limited as the tools that are used for member specific tasks are not open to others making consensus building and information exchange more difficult. By using a common tool as a starting point to plan activities and set targets that can be followed there, and creating better visibility to share member's pain points, a positive improvement mindset can be formed.

RQ2. What are the elements of modern high performing teams in B2B service business?

High performing teams are to be given more autonomy and power to make changes while time and development resources to this is allocated. Based on the literature and the results of this thesis more frequent meetings and informal but high trust relationships are needed between members (Jimenez et al., 2017). This way conflicts can be minimized and issues addressed openly to find development targets. Cross-functional understanding and expertise are crucial to achieving better than typical outcomes.

Having access to the necessary tools, like task management, and data is an important element to working effectively, especially when other members of the could be distributed geographically and across different time zones. The teams can lack clear formal support and their formation is left largely on the shoulders of the account manager or the informal leader. Therefore, sufficient support must be provided by formal sources (Chiu et al., 2021). The motivation of the members is also weak if they have no clear incentives for the collaboration as the account teamwork will come in addition to their current duties, especially in a global virtual team setting. The team should reach a performing state rapidly in its lifecycle as proposed by Tuckman (1965).

RQ3. How to manage customer experience in B2B service based on data driven decision making?

The company had robust system in place to collect customer experience feedback although the focus was on NPS number. Using NPS is popular amongst large companies but is inadequate in giving a complete understanding (Dantas Sartori, 2024). Until recently the system was on focusing on the customer portfolio level but has been updated to focus on individual customers now which supports decision-making for practitioners. An automated system that spotted problems raised in the feedback triggered task which needed to be addressed by the account manager. Plenty of other analytical reports existed that covered the customer but the main issue with those is their limited usage and decentralized organization across the company. While there is an employee seeing some data and able to make insights from it, they are often not the account team member and thus lack the context and capability to drive changes with the customer. A finding and contribution to the field is that, in a large company, the data that is available and has gone through analysis is not meeting the employees that could benefit the most from that analysis. This means that opportunities for improving customer experience is lost due to data sharing and analysis practices. Implementing reporting practices that focus on a single customer and how their experience is monitored and analysed are needed.

To summarize and provide an answer to the main research question customer centric way of working needs to be introduced in an organization that is followed by using data tools that provide actionable insights which tie directly into the customer experience. Regarding the chosen method and reflecting on the model presented by Peffers et al. (2007), it might be inadequate to this type of highly iterative development process as that is not strongly focused in that model. Software development practices have also changed since 2007 when the model was introduced. Using it can still be good starting point, but its high-level model needs to be adapted to reflect on the actual methodology that emerges for accuracy.

5.1 Practical implications and recommendations

Thesis has demonstrated the usefulness of customer centric data driven decision-making and delivered a digital product to support that in an account team environment while also providing more data visibility to its end users. For the commissioning company there also suggestions on how to implement the tool in the account teamwork process and recommendations on how to improve the account teamwork and data driven decision-making in general.

The companies should provide tools like 360 view to their account teams to identify inefficiencies in their internal workflows and to deliver better customer service. By visualizing, monitoring, and sharing those processes with internal stakeholders, ideas to improve and better cooperate can be derived more readily. Utilizing other data analysis tools should also be done and their findings acted upon. Time and effort need to be invested for improvements and stakeholders convinced to do so. Likewise, efforts to make cross-departmental data sharing and cooperation more frictionless are needed. However, working with customer data, necessary steps must be taken to follow regulations.

Important result of this study was the finding that central management and the frontline employees, like account managers, have differing opinions about current state of key

account team management, and that both groups agree that additional tools are needed to achieve it and better customer satisfaction. Better ways to engage the frontline employees into the development programs and ways of working pushed by the central management are needed and those should be designed with the end-users in mind to ensure its intended effect and user's goodwill.

Finally, the development process and empirical findings indicate that true data driven 360-degree customer understanding is complex undertaking which needs locating data sources, mapping out business processes, and data architecture knowledge. Future developments projects need to include more diverse development team, especially when it comes to creating digital products. Using co-creative development practices and rapid iteration was a good design for an internal project. This allows hearing the end-users better and developing an end-product that will offer better insights from data and will feel more natural to user's workflow. Tying the use of the tool to already established activity, like account team meetings, will also achieve that it will be introduced to them in right setting and will not be abandoned after its development ends.

5.2 Future research

This study leverages literature to build a real-world application of a customer 360 view and create a generalized method to do so in an environment where prior academic knowledge is limited. The thesis builds upon fields of data driven decision-making, high performing teams, and customer relationship management in its global B2B context. Naturally, this somewhat limits the generalization capabilities outside the specific context of this thesis.

As the customer data centric business practices will become more prominent, especially with the rising AI field, additional empirical research should be conducted and shared outside of internal company projects on how to integrate them with processes and employee activities. While these studies are rare in current literature it has been recognized

that digital maturity and management practices offer competitive edge (Catlin et al., 2016).

In future there are many different avenues of research to pursue based on this thesis. Specifically, a clear continuation for this thesis would be research into the actual effects after implementing the 360 view globally and its effects to the customer experience as those will remain out of this thesis' scope. Other interesting starting point for more practical data and software development focusing research would be how to achieve successful cross-departmental projects as data ownership issues can be quite common in companies. Developing new iterative methodologies based on DSRM used here can also be pursued as a topic. Finally, a closer theoretical look at the usage of customer 360 view and customer centric technologies in an account team in a digital setting warrants further research.

5.3 Conclusions

The purpose of this thesis was to solve a problem of data visibility in the case company focusing on the key account teamwork and spare parts ordering process to generate data driven insights and ultimately better customer experience. Also, recommendations for key account management and high performing teams in the context of global virtual teams were presented.

These types of real applications, like 360 view, are not studied or at least commonly shared in the literature and the combination of the theoretical entry points was likewise novel in business-to-business context. Sharing good practices in the academic literature seems to be lagging the B2C scene and professional consulting space. Still, the real practitioners and stakeholders involved in this thesis all recognized the importance of effective data usage and analytics in their work which was also found in the literature studied (Böringer et al., 2019).

The study methodology had to differ from the major established frameworks due to limitations presented in the thesis, namely the iterative development and time and resources allocated for the thesis work and development. A more iterative and exploratory approach as a methodology could be considered. Likewise, the actual inputs that were able to be extracted from different stakeholders had to be scaled back to considerably as the effects and time intensiveness of the collection and co-creation process were hard to fit into the fast moving and full work schedules of the stakeholders. In total eight account managers, two management level stakeholders, three data experts, and one parts delivery expert, besides the sales management and development team, were able to actively contribute to this thesis. The empirical parts data extraction would not have been possible without the help of the company's data experts.

The findings of my thesis show that creating a single view of customer, a 360-degree view, is possible and promising way to aid data driven decision-making, especially in for virtual account teams. The increasing visibility of the customer experience and journey will help the account teams cooperate better and to improve the processes for better customer service and satisfaction. While the final implementation of the tool and follow-up of its effects is still in future the early user feedback results agree of its potential.

This study was able to apply literature and theoretical knowledge to a digital product to generate a tool for creating high performing teams that use data insights for more customer centric action. Detailed documentation of the development process allows future projects to adapt and learn from this thesis. The thesis contributes to academic literature with its novel viewpoint and the inclusion of B2B application of the 360 view concept for better service level development. Finally, the thesis suggests managerial and practical implications for key account teamwork based on data driven customer insights generation and how to manage and develop them.

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Appendices

Appendix 1. Closed beta survey questions

1. Your information (user test group)
2. I have tested the Customer 360 view

Based on your experience in general or with your own account teams, evaluate the current state:

3. How well does the account team understand customer service level today?
4. How well are we using data to identify customer current pain points proactively?
5. How well account team has a common visibility for customer challenges and pain points?
6. How well does an account team see the whole customer journey and experience?
7. How well the account team members understand and see progress of each other´s tasks?

How well do you agree with these statements? (1-5)

8. We should do more data driven decisions
9. We measure individual customer performance well
10. Account team members collaboration could be strengthened
11. My work would benefit from more customer data visibility / transparency
12. Account team is having a shared vision of customer success and our service level
13. Account team is able to easily see and follow-up agreed tasks today

Customer 360 view:

14. Do you agree that 360 view or tools like it are needed to achieve modern data driven customer success?
15. Having the 360 view as a common customer data source and meeting/account management tool will help to achieve the account team goals
16. The 360 view will help to utilize the data better to improve the customer experience

Customer 360 view user experience and interface (UX/UI)

17. Customer 360 view is visually appealing
18. The information presented is clear and used terms are explained
19. It provides me relevant information
20. It is easy to use the dashboard/tool
21. I need instructions / training on how to use it
22. Data shown seems accurate
23. Links to other data sources (e.g. CRM) work and can be spotted easily

24. What kind of additional data and/or dashboard features you would like to have?
25. Based on your user testing, what is your overall rating for the Customer 360 view as a customer relationship and account team management tool?
26. What kind of use cases do you see for the tool?
27. Will the Customer 360 view bring value to you in helping to manage and improve the customer relationship & satisfaction? (0-10)
28. Final open feedback