

ABSTRACT

Bachelor's thesis Master's thesis

| | | | ate's thesis al dissertation | | |
|---------|--|-----------------|---------------------------------|--|--|
| Subject | International Business | Date | 30.11.2020 | | |
| Author | Heta Pirttijärvi | Number of pages | 90+appendice | | |
| Title | How global medium-sized SaaS-companies conduct market intelligence | | | | |
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Abstract

Supervisors

There is a clear research gap regarding the topic of market intelligence (MI) in global medium-sized SaaS-companies and very limited studies have been made on the matter despite the realized need for market intelligence in such companies. The aim of this thesis is to investigate how global medium-sized SaaS-companies can conduct market intelligence. There are three sub questions in this study: how MI is conducted in general and what factors have an effect on how it is done, what needs to be taken into consideration in MI particularly for medium-sized companies, and what the challenges of conducting MI are for medium-sized SaaS companies.

The study is done by first looking into previous studies, focusing on three main models, a structural, attitudinal, and strategic view. Afterwards, a qualitative study is made on the matter with a multiple case study by interviewing five companies. This allows for a broad understanding of the subject as well as the possibility to compare the findings between the companies.

The findings of this thesis support previous studies made on similar topics, for example the fact that company size is one of the main factors in determining the level of MI in the company. In addition, the study also brings forth a final framework that shows how global medium-sized SaaS-companies can conduct MI and which factors affect the level of it.

In terms of the main findings of the study, one can see three main aspects. Firstly, that global medium-sized SaaS-companies can conduct market intelligence in three main ways, as presented in the final framework. It is, however, argued, whether conducting MI on a higher level would result in a competitive advantage or whether it is necessary or even possible. Secondly, the main aspects that affect the level of MI are company size, internationalization level, importance of MI, level of competition, as well as the people involved in MI. These are factors that managers can consider when pursuing different levels of MI operations. Finally, the largest challenge was found to be the lack of resources available for the operations.

In conclusion, the study contributes to theoretical and managerial implications in several ways partly because there are very limited studies on the matter. In addition to supporting previous research, a unique framework is presented to enable for a broad understanding of the topic.

| Key words | SaaS, Market Intelligence, SME |
|-----------|--------------------------------|
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HOW GLOBAL MEDIUM-SIZED SAAS-COMPANIES CONDUCT MARKET INTELLIGENCE

Master's Thesis in International Business

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30.11.2020

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1 INTRODUCTION

This chapter gives an introduction to the topic of the thesis, why it is studied and what the aim of the study is. In addition, it also defines the key concepts that are visible throughout the thesis as well as introduces the structure of the thesis.

1.1 Motivation for the study

The goal of a business from a purely operational view is clear: to maximize profitability and return on investment (see, for example, Gupta 2008). Regardless of the industry, in order to be able to reach this goal, it is crucial to understand what is happening in the market, what other companies are doing, and how the customers are behaving (see, for example, Navarro-Garcia 2013, 1). Especially in the fast-paced and unprecedented environment we live in the year of 2020, it can be stated that understanding the market and opportunities helps in achieving the goal of the business and even staying above the zero line. Jamil (2013, 463-364) states that market intelligence has become more important during the last years due to the fact that while there is more knowledge and data available, the knowledge is also becoming increasingly crucial for companies' operations. Falahat et al. (2020) also find how market intelligence can be determined as one of the key export capabilities for competitive advantage also for smaller companies.

Looking back in time, in 1991, it was stated that small and medium enterprises (SMEs) do not actively look for information about the market or have market intelligence structures and that very little research has even been conducted in how SMEs need market intelligence. Back then, market intelligence was something only large companies had the opportunity to have, while the need for information was smaller. (Folsom 1991, 16-17, 19.) In 1999, it was stated that there should be more emphasis put on market intelligence as the competition globally advances (Tan & Ahmed 1999, 306), and already in 2000, the importance of market intelligence was recognized to be required if a firm wants to stay up to date with the changing market (Lackman et al. 2000, 6-7).

Fast forward 20-30 years, and the situation continues to develop. In 2019, market intelligence was already called a "cornerstone" of e.g. marketing, where every decision made should ideally be based on how the markets are behaving and reacting (Gebhardt et al. 2019, 72).

Although the importance of market intelligence has become more and more clear to leaders, the application of MI and how they would fully function, especially in smaller companies, is still less known. Gebhardt et al. (2019, 73) confirms this, as the authors explain how although the importance of MI is clear, it is still less clear to managers *how* they can make sure the MI processes are implemented across the organization. Still in 2016, one of the seven big problems managers were facing in marketing was the lack of market intelligence, more specifically using the insights available (Jaworski et al. 2016, 34).

Moreover, having been visible in academic studies for decades, there is still a lot more studies made on how large corporations use MI structures (see, for example Macpherson 2000; Gebhardt et al. 2019; Wright & Calof 2006), with focus still lacking from smaller companies almost similarly to what the situation was 30 years ago. One might even say there is a clear research gap when looking at SMEs (Navarro-Garcia et al. 2016, 365). This is true even though the importance is already recognized, as presented above.

Furthermore, although there is some research available in SMEs and market intelligence, there is very little research made on global medium-sized SaaS-companies' market intelligence structures. This is true even though it has been stated that the industry is vulnerable to various disruptions (Apostolov 2020, 3), making market intelligence in such companies extremely important and justified. Therefore, the need for such studies is clearly supported.

To conclude, there is a clear demand for studies on how SMEs and more specifically global medium-sized SaaS-companies can build market intelligence structures and what they need to take into consideration. Therefore, this study is an extremely interesting topic not only for the writer herself, but also for the broader field. The fact that this thesis will be focused around medium-sized companies will be opened up more in the next chapter.

1.2 Aim of the thesis and key concepts

The aim of the thesis is to answer the question "How can global medium-sized SaaS-companies conduct market intelligence?" To be able to answer the main question, there are three clear sub questions to be looked at:

- How do companies conduct MI and what factors have an effect on how it is done?
- What needs to be taken into consideration in MI particularly for medium-sized companies?
- What are the challenges of conducting MI in medium-sized SaaS companies?

Because of the lack of academic research on conducting market intelligence in particularly global medium-sized SaaS-companies, the focus on the literature review will mainly be on a wider angle, on SMEs (small and medium sized enterprises) in general. The rest of the thesis will then focus deeper on global medium-sized SaaS-companies, in order to be able to get an accurate view of the subject.

Due to this thesis looking at market intelligence in various ways, it is first necessary to define the term. Cambridge Dictionary (2020) defines market intelligence (also referred to as MI in this thesis) as "information about customer demand, competitors' products, etc. in a particular market that a company uses to help it decide what products to sell, what prices to charge, etc." Compared to other definitions, the definition may be a bit narrow, as for example Maltz & Kohli's study (1996) would define MI as a business function that improves scenario predicting and planning. Cornish (1997, 451) adds on how MI combines internal and external data to allow for better strategic planning using, for example, common analytical models. It can also be defined as a continuous process to find information from a vast pool of data as well as implementing this information into the decision making of the management (Jamil 2013, 464). Carson et al. (2020, 15) fill in the previous definitions by bringing in the environmental factor, as they define MI as "an informational resource that facilitates firms in learning about their current and future environment regarding customers, competitors and channels".

Carbonell and Escudero (2010) identified three main characteristics of MI functions, as seen below. These three characteristics are also visible in other studies regarding the subject (see, for example, Gresty 2014; Jamil 2013; Hughes et al. 2008).

- 1) Gathering information on customers and competitors as well as threats and opportunities
- 2) Spreading the knowledge to other departments
- 3) Utilizing the information available to respond to changes in the industry and market

As MI is such a broad term as has been established, it is also often also linked to competitive intelligence, CI, and business intelligence, BI (see, for example Wright and Calof 2006). Therefore, the defining of the two other terms is also deemed necessary. Competitive intelligence (CI) can be defined as a business discipline "based on understanding the competitive environment in order to drive to competitive advantage in a marketplace" (Calof et al. 2018, 662). Jamil (2013, 465-467) states that MI and CI can be complementary to each other, although MI can be thought to be a more continuous process of collecting and presenting knowledge, while the goal of CI is to give detailed answers on a specific case or decision, often centered particularly around competitors. Business intelligence (BI), on the other hand, is defined as "combining data gathering, data storage, and knowledge management with analytical tools to present complex internal and competitive information to planners and decision makers" (Negash & Gray 2008, 178).

To conclude the difference between the three terms in simplified terms, one can consider BI focusing on what the company is doing, MI focusing on what everyone is doing and what is happening in the market, and CI focusing on a more detailed aspect, such as the competitors (Moorhead 2019). It must also be noted that these three terms have varying definitions, sometimes overlapping or even including each other. For example, in the study by Chen et al. (2012), market intelligence is seen to be a part of the applications within "business intelligence and analytics". Although the three terms are sometimes used interchangeably in studies mentioned in this paper, the questions in this thesis will focus on market intelligence as a larger term, which includes competitive intelligence. The working definition of MI in this thesis based on previous research can therefore be defined as "the process in which a company pursues to understand market trends, opportunities, and the distinct features of its competitors and the market as a whole". As MI is a broad term, there are various different topics in previous literature. The scope of the term and which factors will be focused on is explained in chapter 2.1.

In addition, due to the strong focus, it is necessary to also identify what an SME is. Although this thesis is focusing on medium-sized companies, the broader term SME is defined here, as the definition of medium-sized companies is included in it. There is no definition for small and medium-sized enterprises that applies globally as each country has the opportunity to decide the limits for themselves. The importance in the definition is specifically the number of employees or revenue under the threshold set in each

country. (Liberto 2020.) In the US, an SME can have up to 1200 employees (Ward 2020), in China up to 1000 employees (chinabriefing.com) whereas in the EU an SME may have 10-250 employees (European Commission). The common ground is, however, that each country seeks to differentiate smaller companies from large corporations.

In this thesis, as the literature will be focused around SMEs due to the limited amount of literature on medium-sized companies in particular, there may be different definitions and limits for each paper depending on which country the paper is written in, for instance. Therefore, the importance is not on how many employees there are or what the revenue was a certain year but rather on the characteristics that define SMEs in terms of their behavior. It must be noted that SMEs are not, in fact, just smaller versions of larger companies, but have their own distinct features. For example, SMEs have more informal decision making, less established procedures and more tacit knowledge for problem solving. (Salles 2006.) Moreover, the studies made on SMEs have previously focused on their differences and heterogeneity as opposed to homogeneity (Marchesnay 2004).

The definition of a medium-sized company in this thesis is therefore not based only on the amount of people or annual revenue per se, as the case companies in this thesis vary largely in terms of head count and revenue. Instead, the important aspect is that these companies identify themselves as medium-sized companies, meaning that they are not large corporations but, as Salles (2006) and Marchesnay (2004) introduced, have their own distinct features. The working definition of a medium-sized company in this thesis can therefore be defined as "a company that is no longer a small company and therefore has more than 150 employees, but does not identify itself as a large corporation and thus has its own distinct features such as informal decision making, as well as limitations in terms of, for example, resources".

A SaaS-company, on the other hand, is a company that offers a Software as a Service. In practice this means that the company's business is an application that is made available on the internet for customers to access. (Brok 2020.)

The structure of this thesis is as follows. First, there is a literature review on market intelligence and what the past studies say about the subject of conducting MI in different companies. After that, the specific features and challenges for SMEs and SaaS-companies in particular will be examined. In chapter 4, the research methods will be introduced in more detail after which moving on to the actual research and findings in chapter 5. Finally, the 6th chapter will focus on answering the research questions by bringing forward conclusions, followed by a summary in chapter 7.

2 MARKET INTELLIGENCE LITERATURE REVIEW

This chapter goes through secondary sources to explain why market intelligence structures are important, how they are formed in general, what SMEs in particular have to consider, and what factors have an effect on how MI is conducted. Before anything, however, the scope of the literature review is introduced.

2.1 Scope of the literature review

The themes examined in this thesis have been chosen from various types of academic studies related to market intelligence due to their relevance in terms of this topic and they are highlighted in Figure 1. The topics of several studies have been utilized in the making of the figure (see, for instance, Calof et al. 2018; Carson et al. 2020; Gebhardt et al. 2019, Gresty 2014; Hendar et al. 2020; Jamil 2013; Jin & Jung 2016; Lackman et al. 2000; Liu 1995; Navarro-Garcia et al. 2016; Ross et al. 2012; Soilen, 2017), and the aspects in the figure are gathered on the basis of the writer's own findings.

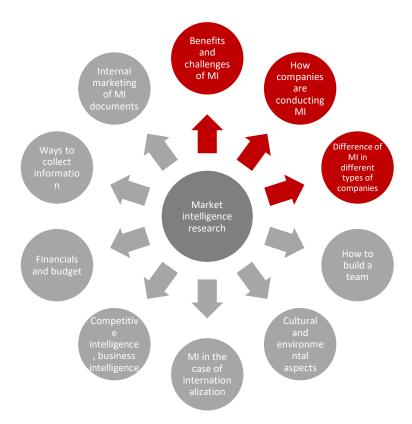


Figure 1 Different aspects of market intelligence in academic research

As can be seen in Figure 1, there are several other aspects that could be investigated, such as cultural aspects in forming a MI function or how MI is used in the case of a company internationalizing its operations. The topics chosen are based on two reasons. Firstly, the topics are those that have the most research in terms of answering the question of how global medium-sized SaaS-companies can build MI structures. Secondly, they are chosen based on what the author of this thesis sees the most relevant for answering the sub questions.

In order to be able to do this, several different types of research need to be investigated due to the fact that there is very limited information on specifically medium-sized SaaS-companies' market intelligence functions. Four main types can be distinguished: general research on market intelligence, research on how MI is conducted in general, SMEs and MI and SaaS-companies and MI. They are presented in the diagram below.

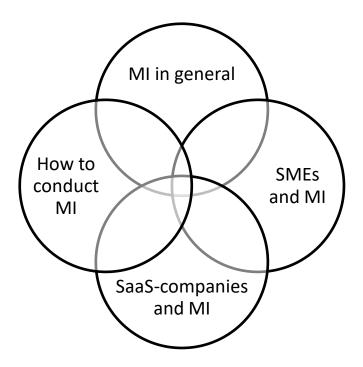


Figure 2 Venn-diagram of literature review research

As can be seen, all of the different types of research have some overlapping with each other. They will also contribute to each other during the study, as the different themes arising can be brought together. In fact, the focus of this thesis will be precisely in the intersection of these four themes in order to answer the thesis question in the best way possible.

2.2 Why market intelligence structures are important

The author of this study thought the literature review would be useful to start with why MI processes and structures are important in general, which serves as a foundation of the rest of the study. MI is an important aspect in delivering what business managers need, for example learning about competitors, identifying opportunities and threats, and helping with effective decision making (Li & Li 2013). In fact, the firms that gather and use intelligence data about the external environment they operate in are more likely to be able to make better decisions (Erevelles et al. 2016).

In several studies over the past few decades MI is also a means to be able to implement a market-oriented corporate culture, which means finding the correct information on e.g. competitors and coordinating this with different functions within the company (Narver & Slater 1990, 20-22). This process of sharing information including competitor strategies and customer needs between different teams within the company is critical for creating value over the course of the company's operations (Hughes et al. 2008).

In fact, MI is a clear driver in terms of business performance. It is proven to help understand the needs of the company's customers, identify opportunities, and minimize risks due to lack of information in the decision-making process. In addition, there is a clear correlation between the results of market intelligence, e.g. responsiveness to market or speed, in responding to competitors' actions and business performance. (Hendar et al. 2020.)

Gresty (2014) divides market intelligence needs into three subcategories: market, sector, and economic trends being one, companies being the second, and people the third category. This is presented in Table 1.

Table 1 Overview of market intelligence needs (Gresty 2014)

| Market, sector, and economic trends | Overviews of industry trends, drivers, and | | |
|-------------------------------------|---|--|--|
| | dynamics | | |
| | Technology trends and wider economic | | |
| | developments | | |
| Companies | Hiring trends | | |
| | Company analysis (financial performance, client | | |
| | analysis, number of employees, brand awareness, | | |
| | culture) and benchmarking | | |
| People | Candidate and people moves as well as executive's | | |
| | strengths and weaknesses | | |

The table works as a summary on how MI functions are needed across organizations and how they can bring value to several different functions. As stated in several other studies mentioned above, especially market, sector, and economic trends are emphasized as key deliverables of MI functions (see, for example Hughes et al. 2008).

The general MI cycle is normally made up of five parts: directing, collecting, validating, processing, and disseminating (Tan & Ahmed 1999), and all of these parts of the cycle are considered to bring value to the company (Rouach & Santi 2001). The number of stages differs between studies, although the content is the same. For instance, in the study by Rouach and Santi (2001), the stages are grouped into four: direction, collection, analysis, and dissemination.

Looking deeper into Tan & Ahmed's (1999) definition of the stages, directing means figuring out what to collect and why. These are crucial aspects as the issue is often not collecting information but rather making sure the information is relevant. It is also important here to understand the needs for MI within the company. In terms of collecting data, several sources need to be utilized and they all need to be geared towards the goals of the intelligence team. Validating means assessing both the sources as well as the data. In the processing phase the data is interpreted using management tools and, in the end, finding results to analyze and present. In the fifth and final part, disseminating, the findings are communicated to the decision-makers. (Tan & Ahmed 1999.) In the similar manner as Maltz and Kohli (1996) emphasized the importance of the format of presenting the findings, Tan and Ahmed (1999) also find it as a crucial aspect of the process.

Hedin et al. (2011, 26) summarize the way the MI function brings value to the company by showing the main benefits of a systematic MI program in one picture. As opposed to the representation by Gresty (2014) however, Figure 3 focuses on crossfunctional benefits instead of subcategories within the organization.

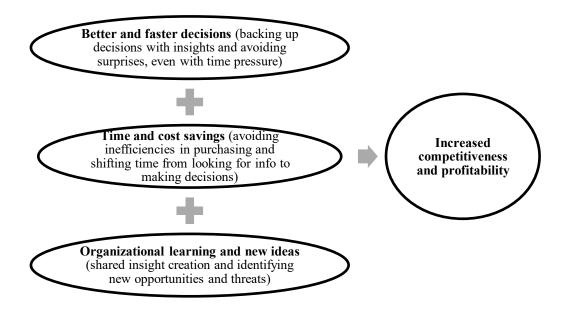


Figure 3 Main benefits of a systematic market intelligence program (Hedin et al. 2011, 26)

The three main benefits of market intelligence are in this case better and faster decisions, time and cost savings as well as organizational learning and new ideas. These then translate into increased competitiveness and profitability. Although the visualizations vary between researchers, the benefits remain in agreement across different studies (see, for example Calof et al. 2018; Soilen 2007; Cornish 1997). One can therefore conclude that although the exact representations varies, it is evident that there are several benefits in conducting MI across countries and different company types.

2.3 How market intelligence is conducted in general

Conducting MI is very common in especially larger companies, which is proven by 68% of companies having MI teams according to a study made in 2013 with participants being executives from 64 different countries. Of these companies, 92% of all respondents agreed their organization has benefited from implementing an MI team. (GIA 2013.)

As there are also many ways in which MI can be conducted, the situation is looked at through the lens of three main models in this thesis. The first one compares different maturity levels in terms of MI structures, the second one classifies the companies by their attitudes towards MI, and the third model has to do with different strategies identified regarding market focus.

Looking into the first model, Hedin et al. (2011, 224) presented that there are different types of maturity regarding market intelligence structures. GIA (2013) further developed the chart into an index, which indicates how advanced the MI structures are within the organization through six parameters. Due to the relevance for this particular topic, the author of this thesis has further modified the wordings in some sections to fit the needs of this research.

Table 2 Market intelligence maturity index (modified from Hedin et al. 2011, 224)

| Description of | Informal MI "Firefighters" | Basic MI "Beginners" | Intermediate MI "Coordinators" | Advanced MI "Directors" | World class MI "Futurists" |
|----------------|---|--|--|--|---|
| Scope Scope | No specific focus. Ad hoc needs | Limited scope, seeking quick wins. Focus on CI and customers | Wide scope, attempt to cover operating environment comprehensively | Analytical deep dives complement comprehensive monitoring of | Broad, deep, future-oriented scope, covers topics outside operating |
| | | | | environment | environment as well |
| Process | Reactive ad hoc processes. Uncoordinated purchases of info. | Analyses made as needed. Info collection from secondary sources. Little or no analysis involved. | Secondary info sourcing complements primary info collection and analysis. | Advanced market monitoring and analysis. Targeted communication of output to business processes. | MI process deeply rooted in organization and integrated with business processes |
| Deliverables | Ad hoc quickly from scratch. | Regular profiles complement ad hoc deliverables. | Systematic reports, structured MI output. | Highly analytical deliverables. Two-way communication. | Future orientation and collaborative insight collection. |

| Tools | Email and | Corporate | Web-based MI | Sophisticated | Seamless |
|--------------|-----------------|----------------|------------------|------------------|-----------------|
| | shared folders. | intranet | portal | channeling of | integration of |
| | | emerging. | established. | both internal | MI portal to |
| | | | Users receive | and external MI | other relevant |
| | | | email updates | content. | IT tools. |
| | | | about new info. | Multiple access | Collaboration |
| | | | | interfaces. | visible. |
| Organization | No resources | One person | A fully | Advanced | MI team has |
| | dedicated | appointed as | dedicated person | analytical and | reached the |
| | specifically. | responsible | manages MI and | consultative | status of being |
| | | for MI. | coordinates | skills in the MI | trusted |
| | | | activities. | team. Dedicated | advisors to |
| | | | | resources. | management. |
| | | | | | Network |
| | | | | | collaborating. |
| Culture | No shared | Some | Moderate MI | People | Strong MI |
| | understanding | awareness | awareness. | participate | mindset results |
| | about role and | exists of MI, | Sharing of info | actively in | in people |
| | benefits of | but culture is | encouraged. | producing MI | being curious |
| | MI. | still neutral. | | content, and top | towards |
| | | | | management | environment. |
| | | | | voices support. | |
| | 1 | | | | |

As can be seen in the chart above, there are 5 different ways identified in terms of building an MI function. Here the first few, the "firefighters" and "beginners" can be thought to be more common in smaller firms, as they require less investments and resources, unlike the last 3, which are more for larger corporations. (GIA 2013.)

The six different aspects through which the different types of MI functions are looked at in the MI maturity index can be considered common, as they are the reasons why differences occur in several studies in the academic field regarding intelligence structures in companies (see, for example, Ross et al. 2012 and Oubrich et al. 2018). For example, the study by Oubrich et al. (2018, 33) confirms the findings in the Table 2 with very similar views. Although the researchers divide the three types of intelligence structures into three instead of five into early stage, mid-level, and world-class, the differing aspects are very similar. It also states that the ways in which intelligence (in their study particularly CI) is conducted differs in, for instance, process, deliverables, and organization.

The second model is by Rouach and Santi (2001). The findings are pretty similar to those by Hedin et. al. (2011) and GIA (2013), as there is similarly five different categories as well as a clear difference in the processes of companies with less resources.

In this case, Rouach and Santi (2001) combine both competitive intelligence as well as market intelligence into "intelligence" as they identify five different types of intelligence attitudes. On a scale of one to five, the "sleepers" did not have intelligence activity due to the management feeling there is no need for it. The next level, "reactives", had some intelligence activity but only when having identified a challenge or change. "Actives" had limited funding but still accomplished to have a continuous input of intelligence. The two highest levels, the "assaults" and "warriors" had dedicated teams or functions set that focused on intelligence and therefore had more resources compared to the other levels.

| Offensive | 5 | | | | | Warrior |
|-----------|---|----------|----------|---------------|---------|---------|
| | 4 | | | | Assault | |
| Active | 3 | | | Active | | |
| | 2 | | Reactive | | | |
| Inactive | 1 | Sleeper | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| | | Amateurs | | Professionals | | Experts |

Figure 4 Five types of intelligence attitudes (Rouach & Santi 2001)

In the study it is evident that SMEs rarely have MI capabilities reaching the top few stages. A large factor that created differences between the different stages was resources, with, for example, "reactives" having a very limited budget and "warriors" having unlimited resources. In fact, French SMEs were often classified as "reactives" and several US SMEs as "actives", while large corporations such as Nokia, IBM, and Canon were classified as "warriors". (Rouach & Santi 2001.)

The third model is by Christen et al. (2009), and it states that the company's data processing effectiveness and uncertainty also influence how the MI is conducted, more specifically what type of an MI strategy the company chooses. The study differentiates between a focused strategy (focusing on only a few markets) and a broad strategy (focusing on many markets). The more effective the data processing is and the lower the uncertainty, the companies choose the focused strategy, as can be seen in Figure 5.

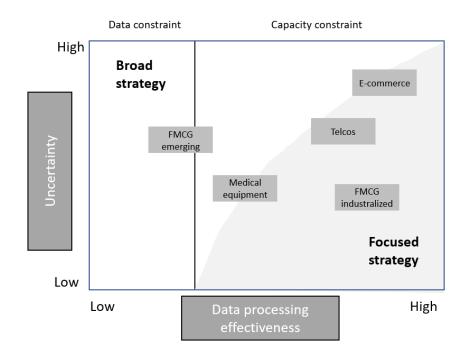


Figure 5 Optimal market intelligence strategy in different environments (Christen et al. 2009)

Industries such as e-commerce and telecommunications (telco), where the uncertainty is relatively high, are at the edge of the focused and broad strategy. This is due to the fact that in addition to data processing effectiveness and uncertainty, also the amount of competition the company experiences have an effect. As per the results of the study, the likelihood that the company focuses on a focused MI strategy increases with more competition. (Christen et al. 2009.) Oubrich et al. (2018) also state that as the competition increases, the company is more likely to have a better MI capability with strong impact to the strategic side of the organization. Christen et al. (2009) also point out that it may be worth only researching the markets where the company operates in or is going to operate, as focusing market intelligence in a certain country often also means a go-to-market decision in the future.

In all of these models, it is clear that a certain factor, specifically the size of the company by annual revenues, has a strong impact on how the MI is conducted. This is also a key aspect of how smaller companies are distinguished from larger corporations (Liberto 2020). In general, smaller companies have a smaller budget and therefore also a simpler way of forming MI, opposite from large corporations. Furthermore, as for example Table 1 shows, as sophisticated MI functions have a future-oriented approach, it is not the case in smaller companies. (Carson et al. 2020, 16-17.) Another point that is

only clearly visible in the last two models is the type of customers the company operates with. Normally B2B companies have larger and more complex teams compared to those operating in B2C. Moreover, industries such as healthcare and tech were continuously shown to have more complex functions. (GIA 2013, 2-10.)

With this being said, although the literature on the differences of MI in smaller companies and larger corporations focuses strongly on the difference in size and resources (see the three models above), one can consider that various other aspects also have a strong effect, mainly the organizational structure. For example, although smaller companies were considered to have a certain type of attitude towards MI in Figure 4, this also has a lot to do with how the company is built, the culture of it, and the leadership's view on the matter. Therefore, the author of this thesis concludes that size is not, in fact, the only crucial aspect to take into consideration. This was also introduced in Table 2, stating that MI differs in aspects such as scope, tools, and culture. These aspects will be investigated more in chapter 2.4.

In addition to the three models presented above and what they mean for building the MI function, there are also a few other details to look into when beginning to build MI into the company. Firstly, factors such as where the function sits and who it reports to are necessary to investigate. Secondly, how the information is going to be used is a crucial point in order to get the full potential of the market intelligence. (GIA 2013.)

Looking at where market intelligence sits, one can see that it is not as clear as, for example, a sales or finance department. MI can be its own department, but it can also be a cross-functional team, visible in several departments. (Soilen 2007, 33.) Although the position varies between companies, there are clear trends visible. In 2013, most organizations positioned MI under the strategic planning/business development or sales and marketing functions. B2B firms are placed even more often in strategic planning/business development functions compared to B2C. (GIA 2013.) Calof et al. (2018) position MI as part of the marketing function in their study in order to gain the most comprehensive view of the future. Similarly, also in the study by Wright and Calof (2006) the marketing department was one of the main departments where intelligence teams were linked across countries.

Although the MI team is positioned in different functions, over a third of respondents serve the top management. There has also been a clear shift towards serving more senior management during the past years, as the MI operations have become increasingly important. It is also crucial to note that in industries where external providers' intelligence

availability is lower, in mainly B2B firms, MI focuses on serving top management even more. (GIA 2013.) Equivalently, most of the respondents in the study by Wright and Calof (2006) stated that the MI team's work was centered around what the senior management needs and as a result, 80% of respondents in Europe showed that the senior management valued the intelligence team's inputs to be essential in the decisions made. Oubrich et al. (2018, 33) also emphasize how the relationship with the management team is different within world-class and early stage intelligence capabilities.

In addition to the top management, strategic and business critical functions are key stakeholders of MI teams. In the study by Calof et al. (2018), corporate or business strategy, sales or business development, and market entry decisions were the top business decisions in terms of who the intelligence team responded to. The study by Wright and Calof (2006) confirms this as well, indicating a similar trend has continued for several years now.

In terms of using the information the MI function produces, Maltz and Kohli (1996, 49) define the concept of using market intelligence as the extent to which the intelligence is used by the company in order to understand the environment the company works in as well as how to effectively make decisions. This is important, because competitive advantage lies specifically in how the company is able to *use* MI and not in how it necessarily builds it (Menon and Varadajan 1992, 55-57). Nalchigar and Yu (2013, 114) propose that a company should have a systematic methodology to closing the gap between the information that is produced and how it is used to create actions.

A big part of using MI knowledge is how the receiving function or person trusts the MI function and the data behind it. In fact, when the receiver trusts the information more, the MI data is used more, as the receivers' motivation to act on the insights presented is also dependent on this. (Maltz and Kohli 1996.) Another factor that has to do with the motivation that is behind the use of MI data is how the insights are presented. Maltz and Kohli (1996) find that a mix of formal and informal communication is optimal to reach the desired results, and the study by Gebhardt et al. (2019) more than 20 years later confirms that the presentation of insights found still has a clear effect on how the data is understood and used within the organization.

In conclusion, there are several different ways to conduct MI and various factors contribute to the decision of how MI is conducted in a company, ranging from the company size to how the management manages to use the information. The differences between large corporations and smaller companies were already introduced in this chapter

largely on the basis of company size and resources. Additional factors to consider for medium-sized companies will be explained in chapter 2.4.

2.4 What needs to be considered particularly for medium-sized companies

Conducting market intelligence is very common in larger companies, but also growing interest in smaller companies as well. According to Hedin et al. (2011, 6), MI structures are often only seen in larger companies due to the efforts and finances required to be able to have an efficient MI team and often an annual revenue of 100 million euro is a ballpark under which a "full-blown systematic intelligence program would in many cases be exaggerated". Larger companies are often also considered more suitable for building MI structures due to the more structured business in general, whereas when talking about smaller companies, the focus is often on an "informal and intuitive approach" (Donnelly et al. 2012, 517).

However, often smaller companies also have the will to, for example, grow rapidly internationally, in which case an MI function is more than justified to be able to get the needed understanding of the market (Hedin et al. 2011, 6). In fact, Erevelles et al. (2016) suggest that regardless of the company size, the use of new data-driven insights is crucial to improve the company's dynamic capabilities. With this being said, the fact that there has been limited information available on the subject has had an effect on SMEs having had limited access to systematic market intelligence sources in the past (O'connor & Kelly 2017, 157-158).

Now, MI resources and sources are becoming increasingly accessible to smaller companies as well by, for example, the improvement of technology and funding from different parties (Carson et al. 2020, 2). Nowadays there are also more ways to conduct MI, with them not having to be such large investments as in large companies (Hedin et al. 2011, 10). For example, MI resources such as personalized online portals that provide customer segmentations and profiles are now more accessible for SMEs, effectively reducing the time spent manually gathering market insights. Now it is crucial to see how smaller firms manage to integrate these new forms of MI in the day-to-day activities of the firms' previous processes and systems. (Carson et al. 2020, 2, 17.)

With this being said, the fight for SMEs being able to fully exploit MI is not over, as recent studies suggest that although the challenge may no longer be accessing MI

information, SMEs still struggle with establishing and utilizing market intelligence (Helm et al. 2014). More specifically, SMEs often still lack the needed expertise, time, and financial resources to be able to fully exploit MI (Coleman et al. 2016). The challenges will be opened more in chapter 3.

Looking at the brighter side, when studying the interrelations between the size of the company and MI's effect on export performance, there was no clear difference in terms of what size the company was. Therefore, also SMEs have the chance to make a difference in their business through MI. (Navarro-Garcia et al. 2016.) In fact, smaller business that are constantly gathering and using MI data are proven to make better decisions in terms of accuracy as well as respond to market changes more effectively (Cacciolatti and Fearne 2013, 17). It must also be noted that SMEs experience clear advantages in terms of collecting MI data. In the study by Lukkari (2017), the respondents who were from smaller companies mentioned things such as "agility", "clear responsibilities", "flexibility", "being quick", and "easier to have an overall image".

Despite the clear advantages, SMEs still invest less in market intelligence due to several reasons. Some of the reasons for not investing in information gathering related systems have been identified to be lack of resources, traditional and product-driven orientations, or the belief that due to the smaller size of the company the MI is not worth the investment (Grimmer et al. 2017, 14). Therefore, naturally the adoption of MI also differs from SMEs to larger corporations. As was already visible in the models shown in the previous chapter, when looking at different ways to conduct market intelligence, smaller companies are often building the processes in a different way. Especially between larger corporations and SMEs the differences in conducting MI differ in scope, process, deliverables, tools, organization, and culture. (Hedin et al. 2011, 224.) Therefore, one may conclude that the differences between MI operations in medium-sized companies may differ from various different aspects, such as the organization type, rather than only the size of the company.

In France a bit more than a decade ago, Levet (2008) found that 67% of SMEs had intelligence structures that were at least reactive. Several factors had an impact on how strong the intelligence processes were, which are aspects that SMEs can take into consideration when comparing themselves to other companies. In the study, the factors that increased the likelihood of a higher presence of intelligence in the SME were a higher number of employees, higher level of internationalization, a higher level of innovation, amount of internet usage, and whether or not the company was certified. Surprisingly,

company growth only had a slight impact on the level of intelligence in the SME. However, if the manager is working in innovation or strategy development, the level of intelligence in the SME is again higher. (Levet 2008.)

Moreover, due to the fact that a lot of the academic studies are conducted on large companies, as stated in the previous chapter, the theory and practice also differ somewhat in terms of SMEs. Ross et al. (2012) highlight that there are differences in many areas. For the sake of relevance, three aspects will be explained in more detail in this thesis, as presented in Table 3. Although the study by Ross et al. (2012) was made in Australia, similar trends are also visible in other studies in different countries and contexts (see, for example, Lukkari 2017).

Table 3 Differences in SME's in terms of literature and practice (adapted from Ross et al. 2012, 14)

| Literature | SME in practice | | |
|--|--|--|--|
| Stating that MI is conducted as formalized | No formalized processes but rather part of other | | |
| processes | operations | | |
| Explaining that it is important to cover a diverse | Collecting relevant info and choosing the most | | |
| range of information from all sources | effective method to do so | | |
| Demonstrating the importance of formal regular | Collecting data when there is a trigger for it, e.g. | | |
| processes | changes in the marketplace | | |

In terms of processes, many SMEs view MI as embedded processes within the company culture rather than set MI structures (Ross et al. 2012, 13). The research made by Ross et al. (2012, 13) shows how SMEs have, for example, the following nested processes within the organization impacting MI data collection:

- "Attending and participating in business networks
- Reading industry magazines and newsletters
- A culture of staff feedback about events and opinions within the marketplace
- Internet search to enable an understanding of customer needs and wants, competitor movements and market trends
- Personal reflection on where the business was positioned within the market"

Therefore, it can be considered whether smaller companies even find it necessary to have a specific person dedicated to market intelligence, as there are so many nested processes incorporated within the organization's operations. In fact, in terms of data collection, SMEs often view market intelligence data collection to be part of another role rather than a formal business process. Several studies still suggest that due to the informal processes of SMEs, also the informal sources of MI, such as client conferences, are sufficient enough for SMEs to gain an understanding of competitors and the market. However, a structured MI process can provide SMEs with more precise information on, for example, performance metrics and competitor insights. (Carson et al. 2020, 5.)

It is also proven that even within SMEs the company size has an effect on the extent to which the company gives importance to the relevance of each source. Medium-sized companies pay more attention to the sources and data gathering, whereas in smaller firms the situation may be overlooked, showing lack of interest and knowledge. (Cacciolatti and Fearne 2013, 16.) This has to do with the fact that even though the previous literature sees SMEs conducting MI as one group, there can be large differences even within that group due to several reasons, such as firm size, for example. This aspect is not clearly visible in previous research, which must be noted when bringing forward conclusions. In general, however, intelligence processes and practices in SMEs can be defined as spontaneous (Sadok & Lesca 2009). This is also due to limitations in resources, as those with less resources and education are more likely to have an early stage intelligence function that is not as structured (Oubrich et al. 2018, 33).

This results in the third point, the fact that in many cases in SMEs, market intelligence is only conducted in the situation of a crisis as a reaction rather than a proactive process. Examples of cases like this are a recession, a reduction in sales turnover, or government changes. (Ross et al. 2012.) Therefore, it may be said that an unprecedented event such as the COVID-19 pandemic would have restarted smaller companies to start conducting market intelligence as well.

However, a bit on the contrary, Lally (2010) came to the finding that the SMEs who had internal reporting as a part of their market intelligence were, in general, more content with their knowledge of the market. One could draw the conclusion that although SMEs often only conduct market intelligence as a reactive measure when something happens, if the resources allow for it, a more proactive approach along with internal reports would be beneficial.

In terms of actually developing an intelligence unit, there are several studies made on how large corporations can do it. In these studies, there may be clear steps to take, such as the incubation phase and structuration phase (see, for example, Rouach and Santi 2001, 558). However, as SMEs are not only smaller versions of large corporations (Salles 2006) there are challenges that come with conducting MI. These will be explained more in chapter 3 after a summary of the factors that affect how firms conduct MI in chapter 2.5.

2.5 The factors that affect how firms decide to conduct MI

Chapter 2 has investigated how MI is conducted in general and what is different in the situation for SMEs. In addition to different types of market intelligence structures, the chapter has also examined what factors influence the decision or possibility to integrate a full-on MI structure and what are the limiting factors. This is presented in Table 4 and it also works as a summary of chapter two in terms of which factors have an effect on the level of the MI in the company.

Table 4 Summary of the factors influencing the level of MI

| | | Limited MI | Strong MI |
|----------------------------|---------------------------------------|------------|------------|
| | | structures | structures |
| 9. | Annual revenue | Small | Large |
| Size | Number of employees | Small | Large |
| s | Resources (expertise, time, finance) | Little | Large |
| any risti | Level of internationalization | Low | High |
| Company characteristics | Level of innovation | Little | Large |
| Chai | Structured business in general | No | Yes |
| _ | Changes in the market place | Little | A lot |
| Environ- ment | Level of competition | Little | A lot |
| En | B2B vs B2C | B2C | B2B |
| | Invested manager | No | Yes |
| 4) | Feel for the need for MI | No | Yes |
| People | Market- and future orientation | No | Yes |
| | Relationship with management | Lacking | Good |
| | Trust in data and how it is presented | Poor | Advanced |

All of the points in the table have already been discussed in this chapter, and the factors that are especially prominent for SMEs according to previous research are highlighted in red. In addition, the factors in regard to the environment are highlighted not because they are necessarily visible in all SMEs but rather, they are visible in particularly medium-sized SaaS-companies, as examined in more detail in the next chapter.

Although the factors such as changes in the marketplace and the industry were only briefly discussed in this chapter and will be examined more in the next chapter, the writer felt it is useful to highlight them in red here. This is to illustrate that although medium-sized SaaS-companies have several reasons to have limited MI structures (such as a smaller annual revenue and employee number, limited resources, lack of a structured business, and poor orientation towards data gathering), the need for strong MI structures may come from the demanding environment, such as strong changes in the market, a high level of competition, or industry-specific factors. These, along with other challenges that medium-sized companies in general and specifically medium-sized SaaS-companies need to take into consideration, will be examined in more detail in the next chapter.

3 CHALLENGES OF CONDUCTING MI IN MEDIUM-SIZED SAAS-COMPANIES

This chapter will first look at challenges in terms of medium-sized companies and after that from the perspective of medium-sized SaaS-companies. The aim is to investigate the matter on a higher level first and only then go deeper into the medium-sized SaaS-companies, allowing for a more profound understanding of the topic in order to be able to answer the third sub question of this thesis.

3.1 Challenges in MI in medium-sized companies

Due to the fast-paced nature of market intelligence functions, several challenges can arise. Lackman et al. (2000, 7-8) identified four key challenges in an effective implementation of MI systems, as seen below. These four aspects will then be opened up in more detail. These issues are relevant for all company sizes, but there are also distinctive features to SMEs and medium-sized companies in particular for each aspect.

- 1) Activity and value of MI in the support of competitive analysis
- 2) Value of data sources integral to MI
- 3) Location of MI accountability in the organization
- 4) Level and trend of MI resources

In terms of activity and value, according to the study by Lackman et al. (2000), over half of the respondents in the study said MI impacts tactical and strategic decision making in a very strong manner. Two thirds of companies indicated that their level of activity increased dramatically, and MI was seen to give value especially to marketing and sales initiatives. Therefore, there are quite high expectations in terms of deliverables, which can pose a challenge. Soilen (2007, 32) agrees, saying that executives may often have too high expectation of the intelligence functions. Due to the nature of the team, it may be expected of them to see into the future, although it is not often possible (Soilen 2007, 32).

This is especially the case in smaller companies, as much of the research around MI is still focused on building proper MI functions, whereas it is established that SMEs often combine MI as part of other processes. Therefore, SMEs can come across the challenge

from either internal parties or external parties that the way the MI is producing activity and value is not enough. (Ross et al. 2012.)

The value of data sources is known to be crucial. In terms of the most valuable data sources in the study by Lackman et al. (2000), customers, manufacturers, and R&D were seen as especially valuable internal data sources, while client meetings scored as high in external data sources. In SMEs almost all information can be considered tacit, and therefore the analysis requires human competences and knowledge, which, if lacking, is a risk (Sadok & Lesca 2009). Furthermore, SMEs are often required to rely on personal networks for information gathering rather than collecting information through systematic market research processes, further affecting the value of data sources (Jin and Jung 2016).

The value of the data is a challenge that is true for both large and small companies, but in the case of smaller companies, there are extra challenges to be cautious about. As established in chapter 2.4, SMEs often decide to focus resources on collecting data effectively from fewer resources, in which case another possible challenge can be getting enough relevant data. (Ross et al. 2012.)

Moreover, the processes for data collection and market intelligence are often designed for and tested on large companies. Therefore, when a smaller company is considering implementing market intelligence, the company is already lacking information, as the processes and tasks designed for large corporations are often not possible to scale down for SMEs. (Banham 2010, 21.)

In terms of location and MI accountability in the organization, it was already stated in the previous chapter that there is no set rule of where to position the team. Due to the fact that MI can be either its own department, a cross-functional team, or alternatively part of other processes, as in SMEs, (Soilen 2007, 33) it leaves a lot of space for the company in question to decide for themselves where to position the operations, possibly posing challenges (Lackman et al. 2012). This also contributes to the key challenge that smaller companies face of often not having a separate MI department, but employees working with it in other teams (Ross et al. 2012).

Another challenge in terms of the location in the organization is the job descriptions, as often employees working with market intelligence may be titled as "business development manager" or "sales manager", which can make it both confusing and frustrating for employees and the stakeholders associated with them (Soilen 2007, 33). Again, this challenge is especially visible in SMEs, where there are often no set roles for MI specialists (Ross et al. 2012).

Furthermore, as smaller companies often have the culture of many employees having several jobs (Ross et al. 2012, 13), an identified employee for MI may not even be needed in this type of organizations, let alone possible in terms of financials. In order for smaller companies to have a specified employee for market intelligence, the company has to therefore step over two hurdles, the resources aspect as well as the attitude towards different jobs in the company. Although this type of a situation may be more common in smaller companies, it must be noted that it is not entirely based on the size of the company but rather the resources and attitudes in general.

The level and trend of MI resources were also already discussed in the chapter 2 and it was established that there are several ways of building the team. Since about 75% of companies have employees working in MI as opposed to outsourcing them (GIA 2013), the resources must be looked at closely. The barriers in terms of data acquisition in SMEs can be categorized into two. Firstly, the owner's tendency to lean towards tacit knowledge that reinforces existing views, and secondly the resource limitations that affect the ability to find, analyze, and present explicit data. (O'Connor and Kelly 2017, 160.) To build on the second point, in a study by Liu (1995), the largest barrier for building a market-oriented company, which MI helps in, was seen to be the lack of time.

Although the need for MI in smaller companies is known, it is still expected that one size fits all. However, because of, for example, the lack of resources, this is obviously not possible. (Ross et al. 2012.) SMEs must, in fact, come by with less resources and expertise, even though they often have similar challenges to larger companies (Wright et al. 2013, 7), making this challenge one of the most difficult ones for SMEs.

One challenge that is often overlooked is the learning and adopting of the new MI processes in the SME. Although learning in smaller businesses has been studied a lot, there is still not a lot of information on how the adoption and utilization of MI is accepted in the company. (Carson et al. 2020, 9.) Although some smaller business may be very open to change and the new processes required to be able to adopt the new MI applications, small businesses in general are not supporting of a learning culture (Reijonen 2010). Therefore, for the learning and acceptance to happen, the owner or CEO of the company must take responsibility to involve all personnel in market intelligence knowledge sharing, for it to enable a learning culture (Carson et al. 2020, 9). This can be true regardless of whether there is one defined employee taking care of the MI processes or not, which accounts to the further challenge that the adoption and utilization of MI in smaller businesses is strongly dependent on the owner/CEO's view of the resource's

importance (Reijonen 2010). This suggests that although the so-called collect process or model of MI is implemented in the company, it still leaves room for challenges due to environmental and social factors. Because the focus of this study is on how the MI can be conducted, these challenges will not be investigated further in this thesis, leaving room for an additional study.

It must also be noted that because the size of the company differs largely between medium-sized companies and even more between SMEs in general, the challenges may be different in each company. The challenges in smaller companies in regard to, for example, lack of organizational structure, may not be as relevant anymore for companies on the higher end of the medium-sized company scale. For example, a company with almost a thousand employees, set organizational structures, and focused resources on market intelligence already enjoy some of the advantages of larger corporations, although they are not one themselves. On the other hand, companies that operate in one region and have only just been founded are still learning and therefore may experience more distinct challenges. This is merely the thinking of the author herself, but she considered it to be important to bring this aspect into play that all of the challenges are not, in fact, visible in all companies. However, the fact that there are differences in the challenges of companies depending on, for example, their size has been investigated in previous research as well (see, for example, Prater & Ghosh 2006; Katsikeas et al. 1994), although not precisely from the same view as this thesis. The challenges and how they differ between different companies are further investigated in the case-study section of this study.

3.2 Challenges in MI in medium-sized SaaS-companies

The current literature around companies that operate with software-as-a-service focus around the point of view of software engineering (Luoma et al. 2012, 190), and there is not a lot of research made on market intelligence in SME SaaS-companies when searching on Google Scholar, not to mention medium-sized SaaS-companies. Moreover, Mäkilä et al. (2010, 166) state that it is a relatively difficult topic to study due to differences in defining the concept of SaaS as well as the lack of boundaries between different software models. The writers also found that the software companies that identified themselves to have SaaS products had varying ways in how their businesses operated, which further makes the defining of certain characteristics difficult.

With this being said, a lot of the studies made about different aspects of SaaS in general also bring a lot of value for this study, as conclusions can be brought forward when investigating the different characteristics of SaaS-companies and how that could affect market intelligence in the end based on other literature. Furthermore, there are also some characteristics, three in particular, found that can be considered universal. Firstly, the service that SaaS-companies are offering is based on a subscription. Secondly, when buying the software, the customer does not need to install any additional hardware. Finally, the updates of the software are automatically applied without the customer needing to intervene. (See, for example, Thousandeyes.com.)

The cloud computing industry that SaaS is a part of has been gaining more popularity in the past few decades and is now a very competitive field despite being young. This allows for the customers of SaaS-companies to be able to change between companies fast, establishing a need for competitive and market intelligence. (Apostolov 2020, 3.) Capatina and Bleoju (2014, 191) are along the same lines by highlighting the significance of the changes in the global software industry at the moment due to several market forces disrupting. However, because of the improvement of artificial intelligence (AI) methods in terms of collecting and analyzing data, the SaaS-companies of today have had to apply state-of-the-art systems, making the industry very vulnerable to various disruptions (Apostolov 2020, 3), affecting the process of conducting market intelligence to be more complicated.

Moreover, as SaaS-companies often operate in business-to-business (B2B), it makes for additional complications to take into consideration in terms of the buyer behavior and what that means for market intelligence. For example, the buying entity often includes several participants from different departments. (Ahlgren & Dalentoft 2020, 27.) This has an effect on the fact that there is often no direct access to the end-users in the same way as in business-to-consumer (B2C), which can pose a clear challenge to understanding the customer and the various trends as well as the reasons behind customer requirements. Therefore, SaaS-companies operating in B2B are often forced to understand the customers and demand from an opinion-based viewpoint, which can further limit the accuracy of the information. (Sauvola et al. 2015.) SaaS-companies also often operate in one specific industry (Ahlgren & Dalentoft 2020, 27), which can be thought to limit the data available for market intelligence purposes due to the restricted view of the market as a whole.

Furthermore, the study by Luoma et al. (2012, 191) states that SaaS firms often target smaller customers compared to the average software company in addition to generating marketing and sales towards the end-user rather than other players. This can also be thought to have an effect on market intelligence, as there is naturally less information available on small firms, if a SaaS-company wants to find competitive information online, for instance.

When looking at the data gathering of SaaS-companies, it is evident that smaller companies do not have the same financial and organizational resources as large companies do in order to conduct the same research. The study by Ahlgren and Dalentoft (2020) investigated different SaaS-companies and how they collect information on the market and service from the customers. The study gives a direction of how SaaS-companies data gathering differs from different types of companies. The study showed that although all five investigated SaaS-companies collected customer input frequently on a regular basis and several departments were involved in the decisions, there were also very large differences in data gathering. For example, various types of qualitative studies, such as surveys, questionnaires and focus groups were visible in addition to quantitative data collection techniques. Therefore, the writers concluded that there is, in fact, no single truth in how SaaS-companies (particularly those working in B2B) should collect data.

The key point from Ahlgren's and Dalentoft's (2020) study regarding this thesis, however, can be considered to be the fact that the size of the company influenced the degree of the customers' data gathering in both a negative as well as a positive way. This further pinpoints the fact that SMEs, even in the SaaS-industry, do not have as advanced data-gathering possibilities such as time, finances, skills and other resources in general. With this being said, in the study it was evident that smaller SaaS-companies had a better collaboration between departments due to the smaller size as well as better overviewing and integration of the pieces throughout the process.

The theoretical section of this study has focused on how MI is conducted in general, what needs to be taken into consideration for medium-sized companies as well as what the challenges for this type of companies are. Although the literature was investigated through literature on SMEs due to the lack of literature on medium-sized companies, it can be considered to serve as the foundation for the rest of the study focusing on medium-sized SaaS-companies. The ways in which medium-sized SaaS-companies can conduct market intelligence, which factors affect it, and what the challenges are will be investigated more in the empirical section of this thesis in chapter 5.

4 METHODOLOGY

This chapter discusses the methodological choices of organizing the research in this thesis. First, the research design is explained after which more information is given on the data collection, data analysis, trustworthiness, and ethics of the study.

4.1 Research design

Research design can be defined as the plan for the research topic, including setting up the methods, data collection techniques, and the approach to analyse the qualitative data that are visible in the research (Myers 2019, 21). It can also be defined as the "logic that links the data to be collected and the conclusions to be drawn to the initial questions of a study" (Rowley 2002, 18). In order to be able to find the right answers to research questions, several approaches to research exist. The research question, in this case the topic of this thesis, is the driver that defines the choice for a research method. (Eriksson & Kovalainen 2008, 30.)

Because of the complex nature of the topic and the will to gain deep understanding of *how* MI is conducted, the qualitative research approach was chosen. Myers (2013, 9) adds that a qualitative method is optimal when there is not much previous research made on the topic at hand. Other researchers agree with this statement as well, making the decision of selecting a qualitative method justified (see, for example, Eriksson and Kovalainen 2008, 5; Creswell 2007, 39-40).

Although the decision between different qualitative methods may sometimes be clear, Rowley (2002, 17) still encourages to consider the method by looking at two aspects. The first aspect to think about is the types of questions that are being asked. Wilson (2014, 120) presents that if the study questions are "how" questions, a case study can be used, whereas "how many" questions would link to longitudinal research methods, for example. The second aspect Rowley (2002, 17) encourages to consider focuses around whether the researcher has control over the events occurring in the study. If no control of the events is available, again, a case study is justified (Dul & Hak 2007, 24).

Because the question asked in this research is starting with "how" and because the author has no control of the events occurring, a case study approach was chosen. A case

study approach can be defined as a research approach that is used to "explore an event or phenomenon in depth and in its natural context" (Crowe et al. 2011, 1).

In addition to the considerations from Rowley (2002, 17) there are several other reasons why the case approach was seen as fitting for this study. For example, according to Yin (2003, 7-8), a case study is effective when the phenomenon is currently happening and it is hard to control. Moreover, the approach is seen fitting when there is not much prior studies made on the subject and a wider understanding is still needed (Dul & Hak 2007, 24), which is also a reason why Eisenhardt and Graebner (2007, 26) see that building theory from case studies can allow for accurate and testable theory possibilities.

Although Yin (2003, 1) states that a qualitative approach like this may often be a challenging method, Crowe et al. (2011, 1) point out how a case study approach is valuable when there is need to find information in a "natural real-life context". This is one of the reasons why case studies are seen as particularly popular in business research, as business issues otherwise difficult to understand are being able to be presented (Eriksson & Kovalainen 2008, 116-117). Dooley (2002, 335) adds how a case study approach can add substance to what is already known about the subject via previous studies constructed.

A case study can vary between two clear variants. Firstly, by how large the bounded case is, for example whether it is an individual or a large corporation. Secondly, by what the intent of the case study is. (Creswell et al. 2007, 246.) There are three variations in the intent (Creswell et al. 2007, 246), and therefore case studies can be divided into three main types: intrinsic, instrumental, and collective case study. The collective case study, which will be used in this thesis, is used when there are multiple cases studied simultaneously in order to be able to understand the phenomena in a broader view. (Crowe et al. 2011, 1-2.) In a collective case study, the researcher often purposefully selects multiple cases in order to demonstrate differing views on the same problem (Creswell et al. 2007, 246). Eisenhardt and Graebner (2007, 27) express how having multiple cases also contributes to a more generalizable theory as opposed to a single-case approach, justifying the decision of a collective case study. In a case study approach, the focus is often not in the individual (in this case the company), but rather on the issue that the individual is selected to explain. A case study can also include multiple sources of information, such as an interview as well as observations and reports. (Creswell et al. 2007, 245.)

Regarding this particular study, the idea is to compare different cases to find whether there is a so-called best-practice way on how to conduct market intelligence. To justify this way of researching to be useful from a business point of view, one can compare it to the situation when Outotec was building its MI function in 2006, and the company had to build it quickly and from scratch. It chose to look at peers and best practices, very much like a case study, further justifying this method choice. (GIA 2010, 18-19.)

Hirsjärvi et al. (2009, 164) also point out how there needs to also be room for changes in the research plan. Because of the natural setting of a qualitative study, the situations may change while organizing the interviews, for instance. Therefore, the research questions and set up may have slight variations during the study as opposed to what was originally intended. (Hirsjärvi et.al 2009, 164.)

4.2 Data collection

4.2.1 Selection of cases

The case selection and data collection phases are some of the key stages of the case research approach (Crowe et al. 2011, 5), although they often receive less attention in methodological discussions compared to the phases of data collection and analysis (Curtis et al. 2000, 1002). Seawright and Gerring (2008, 294) present two main challenges to overcome in terms of selecting the cases. Firstly, truly representative cases are often hard to identify, while simultaneously the chosen cases must have variation in order to get a trustworthy view. In the same study, the researchers identify seven different strategies to choose a case. In this thesis, the "typical case" study was chosen due to the possibility to gain a representative and generalizable view of the situation using a cross-case analysis.

In a typical case study, the researcher wants to find a way to get a general view of the phenomenon using several cases. In order to do this, the researcher often performs a cross-case analysis including a pattern-matching investigation to try and find similarities. It may also be that no similarities are found, in which case it must be stated that there are, in fact, no plausible generalizations. (Seawright & Gerring 2008, 299.)

Because the goal of this study is to reach a broader understanding of the subject, several case companies are chosen for the interview. According to Meyer (2001, 333) the reason to choose several cases is either due to searching for differences or alternatively

similarities. In this case, similarities between the case companies are sought in order to gain a holistic view of how global medium-sized SaaS-companies can conduct market intelligence.

There is no right or wrong answer on how many cases should be chosen, but rather to carefully select cases that either bring forth similarities or differences (Rowley 2002, 21). In this thesis, five case companies were chosen to gain a broad view of the situation in such companies. One possible challenge in addition to those identified by Seawright and Gerring (2008, 294) in this study could have been getting companies to participate in the research. Because the way a company organizes its market intelligence functions is not visible for all on the internet, the writer of this thesis acknowledged that it might be difficult to firstly get companies to participate and secondly for them to give insights into how the company operates. Therefore, the companies interviewed were chosen on the basis of who the writer's current employer has connections to. This is also aligned with one of the six criteria for qualitative analysis from Miles and Huberman (1994, 34) stating that the sample strategy should be ethical. This means that, for example, the study method allows for informed consent from the participants and that participation in general is ethical. Stake (2005, 451) also points out that it is crucial to select the cases in a way that also considers how accessible the cases are in terms of information and time.

However, it must be acknowledged that by doing so, it may allow for subjective views of selecting the interviewees. In fact, George and Bennett (2005, 24) talk about the so-called selection bias, meaning that the researcher selects cases based on previous knowledge, which can result in possible favoritism. With this being said, the case companies are ones that the researcher herself has no personal connections to. Therefore, it can be said that this will not be a strong issue in this study. In addition, the cases must be selected on the basis that they are relevant and interesting (Thomas 2011, 514), which the selected cases can be considered to be in terms of answering the study question. Consequently, because most of the companies are in some connection to the company the writer works for, one can predict that this would help in the trustworthiness of the study, as there is already an established trust and relationship between the interviewee and the interviewer on some level.

The five case companies that were involved in the process of this thesis are all global medium-sized SaaS-companies, with annual revenues ranging from 15-190 million euros and employee counts ranging from 160-1400. As mentioned in the beginning, the definition of an SME in this context is more based on the characteristics rather than size

of the company. For example, the company with almost 200-million-euro revenue and almost 1400 employees is not traditionally considered a medium-sized company. However, it can clearly still be distinguished from large corporations, and brings a lot of value to the research due to the fact that the author has chosen companies on the larger side of the scale to demonstrate how MI can be built in the best way possible. This is because when looking at companies on the smaller side of the SME-spectrum, there is often very limited MI activity, as has been established in several of the studies in this thesis, making benchmarking very difficult. In fact, the writer was in contact with nine companies in total to ask for them to participate in the interview. Out of the four companies that denied the request for an interview, two said they cannot participate in the interview because they have no MI processes in place at all. These two companies were both very small companies compared to the other participants. Therefore, in order to be able to learn how medium-sized SaaS-companies can build market intelligence functions, it is more justifiable to look at companies a bit bigger than a bit smaller to the research question at hand.

Due to the somewhat confidential information, the companies will be treated as companies A, B, C, D, and E as opposed to addressing them by their company names. In addition, because the company does not matter in this case, as the idea is merely to be able to understand the overall situation, the writer agreed addressing the companies by letters is reasonable. To further protect the companies' identity, only a ballpark in terms of revenue and employee count will be given to avoid the recognition of the company. The size information is important to show because it allows for comparisons of MI sophistication and company size as well as resources, and the broader scale will be sufficient in order to be able to do this.

In terms of the actual people interviewed within each case company, purposeful sampling was used. This means that specific people were deliberately selected in order to be able to gain information not available from other sources (Maxwell 1996, 70). In this thesis, the aim was to get to speak to the person responsible for market intelligence in the company. In some companies, it was the director of market intelligence and consumer insights, and in some companies, someone working in marketing who also takes care of MI tasks.

4.2.2 Interviews

The way in which the data is collected in the end depends on what was decided earlier on in the research method planning, more importantly the research method and topic (Myers 2013, 119). Because a case study approach was selected, interviews were deemed to be the most fitting way to be able to administrate this. The interviews are used due to the fact that they can be useful in setting up an atmosphere for free conversation (Myers 2013, 122), which may be very beneficial in regards to the topic at hand. Crowe et al. (2011, 6) also emphasize that it is important that the interviews are flexible for them to allow for the gathering of detailed descriptions before comparing the similarities and differences.

When looking at the different types of interviews, three types can be identified: structured, unstructured, and semi-structured. The interviews in this research are a combination of a structured and a semi-structured interview. Structured interviews are based on specific questions that each participant answers, which give no room for variation between participants' questions, while un-structured interviews resemble more of a free conversation. A semi-structured interview, on the other hand, lies in between the first two. There are set questions asked from each participant, but the questions are openended, giving room for discussion. (Patton, 2002.)

In the interviews in this study there are some questions that are set, such as "Please rate the level of sophistication of your company's MI?", but there are also questions that allow for more freedom, such as "describe how MI is conducted in your company?". The purpose of the interviews is to provide a free and trusted atmosphere where the interviewee and interviewer can get into details about the topic with the combination of set questions as well as free conversation.

The interviews were conducted over a span of two weeks. The invitations for the interviews were sent out via e-mail and the questions were sent out beforehand to examine. The interviews were held in either Finnish or English, depending on the language of the interviewee. Although the interviews could have all been held in English, the author saw it best to conduct the interviews with Finnish people in their native language to allow for a relaxed environment. They were all held in Microsoft Teams, partly because of the distance to international offices and partly because of the pandemic that is going on at the time of writing, restricting the ability to travel to different office buildings. To make it seem more natural, both voice and video were used in the calls. The details of each interview can be seen in Table 5.

Table 5 Interviews

| Company | Date | Interviewee | Duration | Language |
|---------|------------|--------------------------------|----------|----------|
| A | 6.10.2020 | Director of customer insights | 34 mins | Finnish |
| В | 12.10.2020 | Director of sales operations | 33 mins | Finnish |
| С | 13.10.2020 | Solutions Marketing Manager | 47 mins | English |
| D | 7.10.2020 | Head of product marketing | 32 mins | English |
| Е | 12.10.2020 | Chief Marketing Officer | 28 mins | Finnish |

The interviews were fairly quick in general due to several reasons. Firstly, some of the interview questions were quite straight forward, making them quick to answer. Secondly, the topic is something that many of the companies did not have a lot of information to give, which made going through all of the necessary points faster. However, it was discussed in the interviews that if either party have any questions or concerns even after the interviews, they could be in contact.

In terms of the interview questions, the operationalization table was used strongly in determining the questions to make sure no theme was missed. The complete table (Table 7) is visible in the next chapter, when discussing more about data analysis. It must already be mentioned here, however, due to the importance in shaping the interview questions. Because the operationalization is defined as the process in which the researcher shows how each concept will be measured (scientificinquiryinsocialwork.com), the table allowed for outlining the questions starting from a more general perspective and going towards more specific themes. It also allowed for the interviewer to steer the interview in the wanted direction, when different paths were taken during the interviews.

The interview questions were divided into three themes. As opposed to the regular split between different themes in this study (how the company conducts MI and what factors affect it, what is different particularly for SMEs, and what the challenges are), the interview questions were split into conducting, collecting, and presenting MI data. This split is based on the research by Rouach and Santi (2001), indicating that these stages are

crucial parts of the MI process. The split between different interview questions was made by the researcher because she believed she could get deeper insights from the interviewees when investigating the process step by step rather than asking general questions about which factors affect the MI, for example. The full interview question list is available in the appendix, but for the purpose of understanding the analysis of the cases, Table 6 below shows the summary of the interview questions.

Table 6 Summary of interview questions

| Questions | Purpose of the question |
|-----------|---|
| 1-10 | To understand how the MI is directed in the company, including benefits and |
| | challenges as well as support questions such as how strong the need for MI is |
| 11-14 | To understand how the MI data is collected |
| 15-17 | To understand how the MI insights are presented |

Although the primary source of data collection are the interview questions above, also other sources are utilized, more precisely secondary data from the websites of the companies as well as third-party reports about the company. This information is used for several purposes. Firstly, it is used to estimate revenues and personnel numbers as well as understand how the organizations operate in general. This was deemed necessary so that the actual interview process could focus on going through the interview questions. Secondly, the secondary sources are used to verify the data collected in the primary source of data. The goal is to be able to link the two different sources together and countercheck the information gathered in the primary source collection, in this case the interviews. This process is called triangulation and it can be used to verify the observations as well as define certain meanings. (Stake 2005, 454.) It was used in verifying, for example, how large the company is and that the stated role of the interviewee was similar on the LinkedIn-website.

A noteworthy aspect to mention at this stage is that several of the interviewees mentioned that they have been thinking of studying market intelligence capabilities more and that they are happy to participate in the study. This made for a very motivated atmosphere in each interview, which contributed to a positive and sharing environment in all of the interviews conducted.

4.3 Data analysis

Although most of the research focused on research design separates data collection and data analysis from each other, the two phases often also regularly overlap and have similarities throughout the process (Eriksson & Kovalainen 2008, 127). In terms of data analysis, the framework approach is used. According to Crowe et al. (2011, 7), this approach is able to help in examining similar themes that emerge from the case interviews. Srivastava and Thomson (2009, 77) summarize some of the benefits of the framework approach to be the fact that it is systematic and comprehensive and that it allows for a "methodical treatment of the data". There are two ways to analyze the data using the framework approach: simultaneously with the collection process or alternatively after the data collection (Srivastava & Thomson, 2009). Due to the nature of the interviews in this study, the analysis is done after all of the data is collected. This is done in a five-step process (Ritchie & Spencer 1994, 178):

- 1. Familiarization
- 2. Identifying a thematic framework
- 3. Indexing
- 4. Charting
- 5. Mapping and interpretation

In the first stage, the researcher gets familiarized with the transcripts of the interviews. In this thesis, there were tens of pages of transcripts that needed to be examined. Srivastava and Thomson (2009, 76) note that due to the huge amounts of data that can come from qualitative data, it may not be possible to review all of the data collected. However, in this case, the author was able to review all of the transcripts one by one. Because some of the interviews were held in Finnish, it required some work to be done in translating the transcripts to English. However, because the author is native in both languages, it posed no challenges, although it did consume some time.

The second stage of the framework approach involves identifying a thematic framework, which is possible after all of the material is familiar and therefore emerging themes or trends are recognizable. It is crucial to keep an open mind when investigating emerging trends, even though there may be some bias from what is already known. (Srivastava and Thomson 2009, 76.) Naturally, as the researcher had already gone through

extensive amounts of previous literature, she knew what she was looking for. However, the goal was to attempt to be as objective as possible when going through the notes.

The thematic framework is not a straight-forward exercise but rather "involves both logical and intuitive thinking" (Srivastava & Thomson 2009, 76). This, the two researchers say, is due to the fact that it requires ranking issues on the basis of their importance and relevance as well as making connections between different themes. The knowledge obtained before the research may also guide in this process, and Ritchie and Spencer (1994, 177) also note that there is always a chance to adjust the themes selected at a later stage.

In this study, the operationalization model is used as the thematic framework. Although Beest at.al. (2009, 9-10) state that qualitative studies are often harder to operationalize, the author felt it is important exactly for this reason. In addition to forming the interview questions, as mentioned in the previous chapter, it also helped in outlining the themes and how they are correlated with the interview questions in this thesis, as can be seen in Table 7.

Table 7 Operationalization model

| Purpose of the study | Subquestions | Themes | Main theories | Chapters | Interview questions |
|---|---|--|--|--------------------|---------------------|
| How medium- sized SaaS- companies conduct market intelligence | How do companies conduct MI? | -Importance of MI structures -How MI is conducted in general | -MI maturity index -Five types of intelligence attitudes -Optimal MI strategy in different environments | 2.2, 2.3 and 5 | 1-3, 6-17 |
| | What factors do medium- sized companies have to take into account? | -What needs to be considered particularly for medium-sized companies -Factors that affect how firms decide to conduct MI | -Differences in SMEs in terms of literature and practice | 2.4, 2.5, and 5 | 1, 5, 8, 17 |
| | What are the challenges for medium-sized SaaS-companies? | -Challenges for both medium- sized and SaaS- companies | -Several studies, e.g. Ahlgren and Dalentoft (2020) and Luoma et al. 2012 | 2.4, 3 and 5 | 4 |

As can be seen in Table 7, some of the interview questions have to do with several sub questions. This is because certain questions are relatively broad and therefore have the ability to give input to several themes. Although most of the interview questions have to do with the first question, they also bring strong inputs to answering the final question of how specifically medium-sized SaaS-companies can conduct market intelligence.

After the thematic framework step, in the third step in the framework model, indexing, the importance of going through the specifics of the text continues, as each part of the interview manuscripts are numbered according to which theme it relates to. It can be thought of as the pre-stage to the fourth stage, charting, where each number correlates to a certain theme, after which each theme is set under headings and subheadings. A crucial point is to make sure the researcher is constantly aware which data point has to do with which case study. (Srivastava and Thomson 2009, 76.)

The final stage, mapping and interpretation, brings out the final analysis made on the basis of the previous steps conducted in accordance with the interview manuscripts. The goal is to produce a framework or representation of the phenomenon at hand, which guides the researcher in the final conclusions of the study. It must also be noted that although an objective mapping and interpretation is made, the recommendations made by the researcher always portray the attitudes and values of the interviewees. (Srivastava and Thomson 2009, 76.)

Although the prior steps can be seen to be very important, the final analysis stage is the one which brings out the value of the research. Looking deeper into the analysis stage, the cases were first compared individually after which a cross-case analysis was performed, as was recommended by Yin (2003, 116). The cross-case analysis included comparing the different themes, in this case the different ways in which the companies conducted market intelligence. This also allowed for a more precise understanding of each case. Simultaneously, the found patterns were compared to theories, as Creswell (2007, 163) suggested.

4.4 Trustworthiness

The trustworthiness of the study is necessary to evaluate, as it has a strong impact on determining how the findings can be utilized (Sarajärvi & Tuomi 2017). Law (2002, 337)

also adds how evaluating the trustworthiness of the study makes the reader more confident in the findings of the study. Especially in qualitative studies, where there is a lot of room for subjective views, the trustworthiness is often harder to prove. Therefore the researchers have the need to provide a lot of detail in terms of the fieldwork made to prove that the results are justifiable. (Shenton 2004, 63.)

Lincoln and Guba (1985) propose a criteria, accepted by many (see, for example Shenton 2004). It can be used to address the trustworthiness of qualitative studies, including the following points:

- 1) Credibility
- 2) Transferability
- 3) Dependability
- 4) Confirmability

In terms of credibility, it must be investigated how well the findings of the study relate to the reality presented in other studies as well as what can be observed from the real world. In order to improve this aspect, similar research methods as in other similar studies can be used, triangulation can be performed, getting information about the case companies' culture beforehand can be performed, random sampling is made, frequent debriefing is done, and several tactics can be used to ensure the honesty of the parties participating. (Shenton 2003, 63-68.) It is also suggested that there is data collected from multiple sources, enabling for triangulation (Eisenhard & Graebner 2007, 28). Meyer (2001, 337) also highlights that when similar insights are drawn from various sources, it results in credibility increasing. Yin (2003, 97) agrees by saying that relying purely on one data source may result in a biased view. Furthermore, Meyer (2001, 347) states that a good way to get the credibility aspect of the research to be visible is by having interviews, as they enable for the opening of unclear answers, resulting in clear understandings.

Lincoln and Guba (1985) found that credibility is actually one of the most important factors in defining the trustworthiness of the study. Therefore, also in this study several factors were taken into consideration. Credibility was ensured by using similar research methods compared to previous studies, triangulation was performed, information about the case companies was gathered beforehand, and the interviewees were all willing and secure to give the data and it was collected in an organized way. Data was collected via

interviews and from several different internet sources. Especially the fact that there were several case companies as opposed to just a few as well as conducting a cross-case analysis helped in reducing the bias in the study.

In terms of transferability, it is important that the findings of the study can be applied to other phenomena. With this being said, it has been argued that the transferability of qualitative studies, for example the multiple case study, is often challenging, because they are descriptions of certain phenomena. Therefore, the focus in qualitative cases should be on how well the study was performed and as a result it leaves room for the reader to evaluate the transferability to their own cases in the best way possible. Factors that have an effect on this are the detailed descriptions of the data collection and analysis, how the interviews were held, and who the interviewees were. (Shenton 2004, 69-70.) This was originally also initiated by Lincoln and Guba (1985) as they felt the responsibility for determining whether the case is transferable or not lies within the reader's views, and not necessarily the author's, as long as sufficient details are given.

The fact that the data collection and analysis phases are explained in detail and that the result of each case is opened up helps in making this study more transferable. According to Shenton (2004, 70), there is no clear understanding of the extent of which the information needs to be provided. Therefore, the author has chosen to present as much information as possible about each interview, for example, to allow for transferability. However, Shenton (2004, 71) questions whether it is even possible to recreate a study in the same way in different environments and get the same answer, simultaneously disregarding the important aspect of qualitative studies, the context. Therefore, it can be said that the transferability of the study can also be questioned to a certain extent.

Dependability has a lot to do with transferability, as it is the ability of other researchers to be able to create the same study and get the same results (Shenton 2004, 71). For example, someone else could also interview SME SaaS-companies and get similar and comparable results. Therefore, all of the details on how the study was made need to be laid out in detail (Meyer 2001, 348). As was examined in the methodology chapter, all of the different phases and details of this study were presented. Details such as how the interview was held and how long it took can be considered to contribute to dependability.

The final aspect, confirmability, means that the research is conducted in an objective way and that the final insights arise from the actual data collected and not from the author's personal, subjective views. In this aspect, again the precise descriptions of each

phase of the research process is crucial as well as the concept of triangulation. In addition, the fact that the researcher admits his or her own biases in the study may also increase the confirmability. (Shenton 2004, 72-73.) However, several studies have noted that in qualitative studies, objective views are often almost impossible to completely exclude (see, for example Meyer 2001, 344). Meyer (2001, 344) highlights that especially in interviews the relationship between the interviewer and interviewee contributes to how the results are interpreted and shown, for example.

In this particular study, the researcher has admitted that in the interviewing stage she knew what the theory said about the subject and therefore what her expectations on the answers were. However, the researcher wrote down each answer as the interviewee said it, without interpreting them into something distorted. Therefore, as Meyer (2001, 344) wrote, although it is difficult to completely exclude objectivity, it is important to seek to constantly exclude initial expectations and assumptions during the interview process as well as the entire research process. Because this was done during the entire process, confirmability can also be thought to be sufficient. Furthermore, the shortcomings in the study's methods and effects are also important to bring into light (Shenton 2004, 73), which are visible in chapter 6.3.

4.5 Research ethics

Ethics is not a simple aspect of studies (Rhodes 2005, 25), especially in qualitative research methods. In fact, researchers who use qualitative methods in their research are more often having to explain the decisions made in terms of research ethics (Ells 2011, 881). Orb et al. (2001, 95) see that the ethical issues in qualitative research can be minimized by acknowledging specifically three well-established ethical principles, autonomy, beneficence, and justice.

Autonomy refers to the informed consent (Orb et al. 2001, 95). Rhodes (2005, 25) states that informed consent is one of the most important aspects of the main standards of ethical research. In this study, each of the participants were willing to participate and they were all contacted in the same way to ask for their participation. At any stage could they have also easily cancelled the interview if wanted, as they were all held via video call on Microsoft Teams. The author herself sees that because the interviewees were told that the

companies were kept anonymous, they may have had more incentive to participate and speak freely about the current situation in the company.

Orb et al. (94) agree by stating that "confidentiality, informed consent, and privacy" are factors that should be visible in interviews, as they were. Smith (2003, 5) states that one step in making sure the confidentiality and privacy of the participants is respected is to discuss the limits. For example, the participants should be given information on how the research data will be used and what will be done to secure the identities. In this study, the fact that each company is kept anonymous was communicated before the interview to each interviewee, in addition to stating which factors will be visible, in this case the title of the interviewee as well as the approximate revenues and employee counts of the company.

Beneficence, the second ethical principle, refers to preventing harm and thinking about the other side (Orb et al. 2001, 95). Mero-Jaffe (2011, 232) sees that especially the process and quality of transcripting the interviews may be a large factor in terms of the ethical practices in the study concerning taking the other person into consideration. Mero-Jaffe (2011, 232) identified five factors that can have an effect on the quality of the transcript: the researcher, interviewer, transcriber, interviewee, and the equipment and place of the transcription. In this study, the three first players of the list are the same person. This can either be considered to help the situation as there are fewer moving factors but on the other hand, can also make the risk of being unethical even larger, as one person does the research, the interviews, as well as the transcribing. As mentioned earlier, the author of this study constantly sought to write down the answers of the interviewees in the way they were said, without interpreting the information at the early stage in any way.

The final ethical principle, justice, means that equal share and fairness needs to be distributed (Orb et al. 2001, 95). For example, the fact that the interviewee knows some of the industries the companies are working in may result in unfair biases in the study, as suggested by Orb et al. (2001, 96). However, the researcher constantly pursued to treat each case company in the same way in terms of, for example, transcribing and storing the data. All of the information was visible only for the author herself and no other party could, for example, link the company data to the company name. In addition, each interview transcript was stored in the same place behind a password.

5 FINDINGS

This chapter explains the findings from the interviews conducted. In addition to explaining the results from the case companies, this chapter also analyses the correlations and findings in relation to previous research. First each case company's interview will be explained shortly on its own, and after that a cross-case analysis is conducted. The case companies are organized by size relative to the employee count from largest to smallest.

5.1 Findings from each case company

5.1.1 Case company A

Company A is a Finnish company with a revenue of approximately 100-150 million euro in 2019 and about 1200-1400 employees. It is the largest company in this research scope in terms of employee count. As the company is relatively larger in size, they have a bit more of a sophisticated level of MI, resulting in the interviewee rating it as 3/5. Although one person in the company has full ownership of MI, it is not their only role. The interviewee working in MI does, however, work as a combining force that does a lot of collaboration with different parts of the organisation. The marketing team as well as the person taking care of analyst relations are closely working with the MI as well, having a global view of the situation.

Unlike many of the other case companies, company A has set ongoing processes in addition to ad hoc analyses. Firstly, the company has an information sharing forum every quarter, consisting of a PowerPoint presentation and discussions around it. Secondly, there is a monthly report in word form to the board, including MI updates along other information. Thirdly, there are customer surveys set up twice a year as well as an interview with selected customers once a quarter to understand about the market trends and to verify that the company is going in the direction of demand.

The information is spread to other functions, most often sales, when something relevant is available, and more people are brought in the conversation as needed. In terms of sources, in addition to web research, internal analyses and customer interaction, some external companies and analysts are utilised to gather more information about the field.

The scope focuses mainly on the countries where the company operates as well as the main competitors, but the point of view is often kept global.

In terms of ad hoc analyses, company A also utilizes its network, takes part in conferences, visits competitors' sites, and does interviews to learn about the market. Battle cards – short presentations explaining characteristics of competitors and how the company measures against them – are also created for competitors to meet the needs of the sales team. There may also be occasional internal webinars focused on winning against a certain competitor. In fact, before the COVID-19 pandemic, the MI processes were not as systematic as they are today, and therefore used to rely more on ad hoc analyses.

The interviewee sees MI to be very important because it allows for learning about the positioning on the market, gets the chance to collaborate with analysts, and understand about competitors. The management also sees the insights to be important, although the information and communication of the findings are still going towards the management and not the other way around.

In general, company A is quite satisfied with the current MI processes, but the interviewee would still wish for more resources. There is a lack of both financial resources and time. For example, at the moment the focus has been only on main competitors, but ideally they would also investigate more local competitors. It was also discussed how different views, such as the sales team's aspect, should also be brought into the equation. Different teams also have varying needs for MI, and it is sometimes challenging to fit them together. Furthermore, it is sometimes considered to be difficult to gather all of the information from different sources, and to get a view that is as broad and objective as possible. Moreover, in the future the goal is to have a clear process and schedule of reporting, and it is something that can still be developed.

5.1.2 Case company B

Company B is a Finnish company with a revenue of about 150-200 million euros and it has about 800-1000 employees. It is the second largest company in this research scope in terms of employee count. The interviewee would rate the level of sophistication a 3/5, as it functions to their needs at the moment.

The way the MI is conducted in the company is "not as structured as it could be" according to the interviewee. There are five main ways in which the data is gathered on an ongoing basis. Although there are no set structures in place, the data gathering is happening on an on-going basis as something noteworthy is visible. Firstly, there is one person in Europe and one person in USA assigned to taking care of researching competitors and adding them to a living word-document, mainly focused on "battle cards" against competitors. It is, however, only a small part of these two sales professionals' jobs. Secondly, the company has an internal channel for market intelligence sharing, where anyone can post as they see something noteworthy. For example, sales professionals can post a comment asking about tips on how to beat a certain customer. Thirdly, when a new recruitment is brought into the company, there is often market intelligence in some form gained from that. Fourth, there have been regular "lunch and learn"-sessions within the company to focus on certain competitors and the trends they are facing, and this has been accessible to those interested. Finally, one important source of information is meetings after a sales case is lost or won to understand what the customers want, how the dynamics of the market are behaving and how company B can answer to that. There are set interview questions that are then presented and gone through.

The results of all of these aspects are presented to those who find it interesting, depending on what in particular is investigated. The management is also very much interested in MI and is also very involved in the process by, for example, posting interesting things they find as well as studying the main market trends.

In general, the intensity of the MI structures varies between markets. First of all, the gathering of information is different in Europe and in USA depending on the competitive situation. The information is gathered on all markets, but with a focus on the markets where the company's main focus lies. In countries where the company is not operating, it is opportunistic in the sense that it is in close relation to partners in order to be able to reach other markets and the knowledge obtained from them.

As can be seen in many other companies in this study, the main focus is on competitive intelligence rather than market intelligence and market trends per se. However, the management has a focus on how the market is behaving and there have also been some efforts in partnering with other companies to understand more about the market. In addition, company B works closely with analysts and consultancies to understand about the dynamics of the market. However, the main resources used are still the little time set aside from the two set employees from the sales team.

Company B sees several benefits from conducting market intelligence, especially form the competitive advantage point of view. They have gained a lot of insights on how to position themselves and which sales strategies to use. However, they see it more important to be the company who creates the trends and becomes a thought leader in the field rather than following where the market is going or what other players are doing.

As challenges, the interviewee sees the difficulty of presenting all of the information. "A lot of individual people have knowledge on the situations, but it would still need to be gathered and dispersed into other functions of the organisation" was an important point that the interviewee highlighted. In the future, in terms of market trends in market intelligence, the company wants to focus on positioning itself as an influencer in the field. In terms of competitive analyses inside market intelligence they hope to be more structured and to create material on a more on-going basis.

In general, company B has several different sources of market information, although especially the presentation aspect is still not structured. As the interviewee also emphasized that it wants to be the one creating the trends in the industry rather than following them, the way in which the company is conducting MI is a better fit for them rather than focusing too much on the outside, even though MI is still considered very important in the organisation.

5.1.3 Case company C

Company C is a French company that has a revenue of about 15-20 million euros and has about 500-1000 employees. The interviewee would rate the MI structures to be a 3/5. The reason for the rating is the fact that the industry where the company operates in is a niche market with very limited competitors, and therefore more intense MI processes are not considered necessary. The interviewee is working in between the marketing team and the product team, and although the interviewee knows a lot about market intelligence, there is no employee that is responsible for MI. The interviewee estimated that MI accounts for approximately eight hours of the company's resources per month.

Company C does not have any regular processes in place but rather collects information in three main ways. Firstly, there is an internal competitive intelligence site, where employees can post information they see on the internet. This is especially used by the sales and marketing teams as well as the management team. Secondly, there are

standardized files that are updated as needed that include information on competitors and how company C measures against them. This is, again, distributed in the sales and marketing teams. Thirdly, quarterly or bi-yearly meetings with the sales team are held to understand each case individually to analyse why the cases were lost or win to understand the demand and changes in the market. In addition, in the management meetings on a bi-yearly basis there is an MI update in addition to internal strategic factors.

The company mainly focuses on its main competitors but also investigates the market and companies doing something remotely similar to company C. The research focuses on the competitors, because the field is relatively stable at the moment. However, as the demand for the industry is growing, there may be some restructuring or mergers and acquisitions in the future according to the interviewee.

The management considers MI to be very important and they have a good sense of how the market is behaving, according to the interviewee. However, due to the niche market and the lack of competitors, the management is not too concerned. In general, especially sales, marketing, and the customer side consider MI to be important, but other employees are not as closely intertwined with it. Therefore, also the main benefits of MI have to do with sales in particularly winning sales cases due to a larger understanding of what is happening in the market. In addition, MI has helped in guiding where the company should go in the future.

As the largest challenges the interviewee sees the difficulty in getting information. Because the company operates in B2B, a lot of the information is highly guarded and behind a paywall and therefore getting the relevant information about competitors, for example, is very difficult. Therefore, the company has to rely on word-of-mouth, on the feedback coming from the sales team, and the CEO's network. The company would like to have more information specifically on how competitors are pricing their products, who their customers are, and what their strategies are.

In general, company C would give its MI a "B+" as they are "not feeling an urgent demand for it at the moment". In the future, as long as the company continues to grow, MI tasks could be up to 50% of a marketing employee's tasks. The company has also investigated buying third-party tools in the future to help with investigating the changes in the market. However, the investments all depend on what will happen in the next year.

5.1.4 Case company D

Company D is a US-based company with a revenue of approximately 20-30 million euros and around 150-200 employees. The interviewee would rate the level of MI sophistication as 1/5, although it is, according to them, "good enough" for now. The company does not see that MI is a core topic at the moment, although they do see the need to develop it in the future as the competition increases. There is no assigned person taking care of MI, but it is rather one part of the marketing team's roles. There are 2 people working with it, contributing about 10-15 hours a month to the MI tasks. There is also a clear information flow in product marketing in general concerning the subject.

The way in which the processes are set out is focused around ad hoc analyses and regular evaluations of competitors by creating "battle cards" in PowerPoint form. Therefore the processes focus more around competitors than general market trends by focusing on doing evaluations of competitors as well as identifying market potential when needed. The main sources are web research, feedback from sales, and discussions with procurement experts, with customer feedback being the main source that drives development. Because the company is considered a born-global company, the focus is on all markets. The company does not have any paid third-party sources for data collecting, and therefore the only resources given to the MI function is the time allocated by the marketing team.

The insights are distributed and used in the sales and marketing teams as well as the management. According to the interviewee, there is no need for any ongoing communication with the management in terms of MI, but the management is rather updated twice a year when the data is refreshed. The management has shown no regular demand for more MI information.

As the main advantage of MI, company D considers the ability to allow sales to react in the right manner if confronted with competition in sales pitches. In terms of challenges, company D sees two main ones. Firstly, the lack of internal importance limits the sophistication of MI, as the interviewee would rate the importance of MI to be around 2-3 out of 5. However, because of the market structure and limited number of competitors, it works at the moment. Second, because of the market not being as defined yet, there is a lot of varying information and numbers, even within analysts. Therefore, finding the correct information has proven to be very difficult.

In general, the MI processes set in place work for company D for now, but the interviewee realizes the need for improved processes as the company and market grows. At the moment, allocating more resources for MI is a question of price and value. The importance is also growing, and therefore the 10-15 hours that is used now may need to double in the future when competition grows.

5.1.5 Case company E

Company E is a Finnish company with a revenue of about 10-20 million euros and around 150-200 employees. It is the smallest company in this research scope. The interviewee would rate the level of MI sophistication in the company a 3/5, because it is not considered to be that systematic.

Conducting MI in in company E is not structured and is not assigned to any one person. The main channel for gathering and presenting MI knowledge is through an online channel "market information" which is very broadly in use by both the employees and the management team, where everyone can post articles about competitors or what is happening in the market. Although the online channel is the main way in which MI is conducted, when re-evaluating the strategy of the company, other sources of MI are also in an important role. In order to get MI information for the strategy process, internal questionnaires to the management team have been utilized to gain their information. There is also a market research every third year to understand the market. This research has, however, been viewed more of a marketing expense rather than a market intelligence expense per se.

Furthermore, although there are no on-going processes in place, employees are encouraged to study the market depending on their role, and there is a lot of internal communication going on about the subject. For example, employees might join competitors' webinars to see what they are doing. The goal is for each product manager, for example, to have a clear view of what is happening in the market in their own product.

Company E sees as the main benefit of MI the fact that it gives clarity and certainty in where the company should be going. For example, when reading articles about why customer behavior is different in some market, it helps in understanding how that market can be targeted. In fact, in addition to focusing on the main market that the company

operates in, it also studies markets where it could possibly go. Market intelligence helps in determining whether a certain market has demand for the product and how much.

As the main challenge, the interviewee sees the fact that there is no clear ownership of market intelligence. With this being said, MI is seen to be very important in the company. The interviewee had the feeling that when something has been found in researching the market, the management has then made decisions based on them.

In general, the company sees MI to be crucial in understanding how to target each market and customer, and to understand the differences between different markets, for example. As a clear focus point for the future MI in company E, the interviewee points out assigning specific people to focus on what is happening in the market, enabling someone to make sure something is done when it needs to be.

5.2 Cross-case analysis

The purpose of the cross-case analysis is to compare and analyze each of the cases and their findings, as described in more detail above. This chapter is divided by the two sub questions mentioned in chapter 1.2 regarding both the conducting of MI and what factors affect the level as well as the challenges that arise from it.

Although most case companies, four out of five, identified the MI sophistication to be at a level of 3 out of 5, the researcher understood the situation to be more complex. Firstly, the question was problematic, as it allowed for clear subjectivity. Secondly, there was no established measures or criteria on how to evaluate the sophistication, and therefore it is not considered reliable. Therefore, the researcher has ranked the level of sophistication of each company into a ranking from 1 to 5, the number of companies. This was done based on several different measures identified in the literature review in chapter 2, including, for example, how many people worked in MI, how many distinguished MI processes there were, how often the MI was presented to other parts of the organization, how important MI was seen to be in the company, and how structured the MI function was in general. The higher the number of the ranking is, the higher the level of MI is.

Table 8 Level of MI sophistication in case companies

| Company | \boldsymbol{A} | В | \boldsymbol{C} | D | $\boldsymbol{\mathit{E}}$ |
|-------------|------------------|---|------------------|---|---------------------------|
| Level of MI | 5 | 4 | 3 | 1 | 2 |

These rankings in Table 8 will be used in several of the tables and charts in this chapter to evaluate the sophistication of MI in each company and more specifically the reasons behind them. The next parts of this chapter will be divided into conducting MI and which factors affect the level of it as well as what the challenges are.

5.2.1 Conducting market intelligence in a medium-sized SaaS-company

Conducting MI

One influential factor to state in the beginning is that in all of the case interviews, there was a lot of interest towards conducting market intelligence, despite some companies having a low level of MI. One factor for this can be, for example, the fact that as SaaSbusinesses allow for customers to relatively easily change between providers, it establishes a need for competitive and market intelligence to understand the market (Apostolov 2020, 3). All of the companies, apart from company B, emphasized that they should be doing more market intelligence tasks in the future to keep up with the changing market and competitors. Company B emphasized the will to be the industry leader in terms of creating the trends rather than following them. With this being said, company B already had the second most advanced MI processes in this study. All of the interviewees from all companies, including company B, were very interested in hearing about the results of this study in order to be able to develop their MI processes. This further proves this subject being of importance in the business world in addition to the academic field.

As was established in chapter 2.4, medium-sized firms, part of SMEs, do not often have clear MI functions. In fact, none of the case companies had specific teams or even one person devoted entirely for market intelligence. Interestingly, although GIA (2013) stated that B2B firms have more often placed the MI under strategic planning and business development functions, none of the case companies fit this description. The employees working in MI in all of the case companies were either under sales or marketing, as were also the most common organisational functions according to GIA (2013) and Wright and Calof (2006). Even though the companies are operating in B2B and in the technology industry, they did not have complex MI structures, as the study by GIA (2013, 2-10) and the models in chapter 2.3 predicted. However, it was also already

noted in the models that a larger factor defining the scope of MI is the size of the company and the resources associated with it.

The differences in regard to the literature may be due to the factor that was already introduced in chapter 3.1, stating that even between medium-sized companies the differences may be large due to several reasons not only related to firm size. In general, MI is conducted in a distinct way in medium-sized companies compared to larger corporations, as has been established in the theoretical part of this thesis, but there may still be large differences inside the group of companies, related to, for example, underestimating the importance of MI. These aspects will become visible in the next chapters, but it is crucial to also state here that although previous literature has given a certain view of the matter, there are vast differences even between the definitions and restrictions of the studies, as has become visible in the case studies in this thesis.

The companies had a lot of similar aspects in their MI processes, but also their own distinctive features. All of the companies had some sort of MI processes in place, some more structured than others. Therefore, there are aspects from each company that can be considered best practices. For example, company A had a monthly reporting and a quarterly conference, company B had "lunch and learn" sessions, company C had quarterly meetings with sales professionals to understand the demand in the market, company D had regularly updated battle cards, and company E had an internal MI communication site that was widely in use. Moreover, all case companies had recognized the need for MI and therefore many of them had processes in place that included, for example, internal online sites where employees could post MI news.

A comprehensive way to represent the differences and similarities in the MI processes is by comparing the conducting of MI in the case companies to the three models examined in chapter 2.3., essentially the first one (the Market Intelligence Maturity Index modified from Hedin et al. 2011, 224). From the interviews, it is clear that the case companies are either "firefighters" or "beginners", apart from the largest company, A, which can be considered a "coordinator". This is presented in Table 9. In the columns after each description is the letter of the company that fits the description.

Table 9 Level of MI based on the MI Maturity Index (Hedin et al. 2011, 224)

| Description of intelligence | Informal MI "Firefighters" | # | Basic MI "Beginners" | # | Intermediate MI "Coordinators" | # |
|-----------------------------|---|---------------|--|----------------|---|-----------------------|
| Scope | No specific focus. Ad hoc needs | Е | Limited scope, seeking quick wins. Focus on CI and customers | B, D, C | Wide scope, attempt to cover operating environment comprehensively | A |
| Process | Reactive ad hoc processes. Uncoordinated purchases of info. | D, E, C | Info collection from secondary sources. Little or no analysis involved. | В | Secondary info sourcing complements primary info collection and analysis. | A |
| Deliverables | Ad hoc quickly from scratch. | Е | Regular profiles complement ad hoc deliverables. | B, C, D | Systematic reports, structured MI output. | A |
| Tools | Email and shared folders. | D | Corporate intranet emerging. | B, E, C, | Web-based MI portal established. Users receive email updates about new info. | |
| Organization | No resources dedicated specifically. | E, C | One person appointed as responsible for MI. | A, B, D | A fully dedicated person manages MI and coordinates activities. | |
| Culture | No shared understanding about role and benefits of MI. | D | Some awareness exists of MI, but culture is still neutral. | С | Moderate MI awareness. Sharing of info encouraged. | А , В, Е |

In fact, the descriptions are quite specific in defining the case companies' MI processes. Although most companies have features in several different types of MI, clear trends are also visible. Companies E and D can be described as firefighters. The processes are quite reactive and ad hoc, and there are no resources dedicated specifically. Companies B and C can be described as beginners. There is a limited scope, and the focus is clearly on competitive intelligence and customers, rather than market trends. The information is collected from secondary sources and there is very limited analysis involved. Interestingly, the maturity index specifies that regular profiles complement ad hoc deliverables. This is exactly the case in especially companies B and C, as documents like "battle cards" are presented along with various ad hoc deliverables in company B. In terms of tools, the companies did not yet have any regular updates or reports, but rather internal intranets were emerging.

This was not the case with company A, however, which already had a monthly MI update in place. Certain people were appointed to be responsible for MI, but it was not

their full-time job in any company. Company A also had a wider scope, not only focusing on competitive intelligence as the others.

The factor which is not necessarily in line with the dynamics that the maturity index lies out is the "culture" aspect. Even though the companies' other intelligence aspects were of a firefighter or beginner level, the culture was considered to be a coordinator in companies A, B, and E. Information sharing was encouraged in the organizations and several of them had set up an internal page where everyone can share MI related news. Therefore, there was also a moderate MI awareness within the company.

The only company where the culture was still at a firefighter stage was company D. The interviewee acknowledged this situation and emphasized that as the competition grows, they will have to start incorporating more MI processes. This was also part of their future plan. This is also in line with what Oubrich et al. (2018) suggested, as according to them when the competition increases, the company is also more likely to have better MI capabilities.

In terms of the second model presented in chapter 2.3, the five types of intelligence attitudes by Rouach and Santi (2001), the case companies again fit clearly into specific aspects. As a reminder, Rouach and Santi (2001) identified the lowest level, "sleepers", to not have intelligence activity due to management feeling there is no need for it. "reactives" had some intelligence activity but only when having identified a challenge or change. The "actives" had limited funding but still accomplished to have a continuous input of intelligence. The case companies are situated in the model in Figure 6.

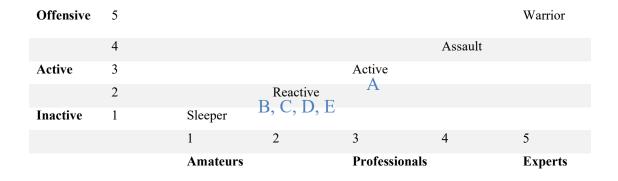


Figure 6 Level of MI based on the five types of intelligence attitudes (Rouach & Santi 2001)

According to what has been presented about the case companies' interviews, all of the other companies can be categorized as "reactives", and company A can be thought of as an "active". As was mentioned already in chapter 2.3, it is common for SMEs to only reach the bottom three stages out of five, as is also the situation in this study. The reason for this was the limited resources, as for example "actives" still have a relatively small MI budget, and the top two stages have more resources to use. It must be considered, however, whether this is because these medium-sized companies do not find it necessary to invest in MI in order to reach the top stages or whether it is a restriction for these types of companies and therefore not possible. This is an aspect that will be revisited in the conclusions chapter of this thesis.

Another aspect to note here is that in terms of how old the companies were, company A was by far the most mature. All of the other companies were born after the year 2000, unlike company A. It can also be considered to have an effect on having more mature structures in the organization in general. In fact, several studies support that the age of the company can have an effect on the processes, innovation, and even the performance of the company (see, for example, Petruzzelli et al. 2018; Coad 2018). Based on the findings of these studies and the author's own understanding, it may be considered that company A is able to have more complex MI structures because of the age, knowledge, and the ability to already have developed other functions to the desired level. It may be that younger companies are only planning to have MI and are still only focusing on the necessary aspects to develop the business to the desired level. This was visible in the other companies, where the MI functions were not as established yet.

The third model introduced in chapter 2.3, the optimal MI strategy in different environments (Christen et al. 2009), stated that the uncertainty of the company as well as the company's data processing effectiveness has an effect on how the MI is conducted. The lower the uncertainty in the industry is, the more the companies have a focused strategy. In this research, two out of five had a focused strategy, where the main focus was merely on the markets they operate in. This is presented in Figure 7, without taking into consideration the data and capacity constraints but rather focusing on whether the company has a broad or a focused strategy.

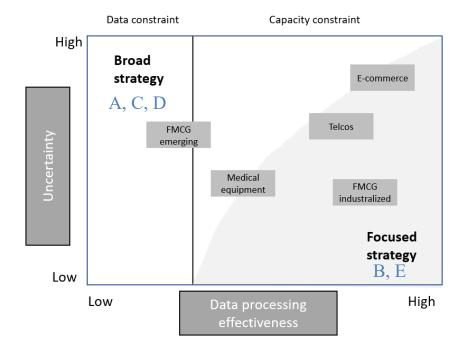


Figure 7 Level of MI based on the optimal market intelligence strategy in different environments (Christen et al. 2009)

Interestingly, as Christen et al. (2009) predicted, the two companies with a focused strategy did not consider the market to have too much uncertainty. Companies C and D had a broad strategy for different reasons as they examined all markets even though the uncertainty in the field was not visible. The interviewee in company C said this to be because of the niche market and the need to understand the larger market. The interviewee in company D pointed out this was because they consider themselves a born-global company. Company A considers the industry to be very competitive and the company therefore also had a very broad MI strategy, considering the global view. Christen et al. (2009) also pointed out that it may be worth also focusing on the markets where the company is willing to internationalize to in the future, as was the case in company E.

As Ross et al. (2012) presented, the MI in SMEs differs from the traditional literature in many ways, and these aspects can all be seen in the case interviews. As the literature says there is generally formalized processes in MI, it was not the case in SMEs or the case companies in this study, where the data gathering was mainly collected as a part of other operations in all companies. The literature states that it is important in covering a diverse range of information, the SMEs generally – and also in this study – collected relevant information from various sources depending on the situation. Finally, although traditional

literature focuses on the importance of forming regular processes, SMEs collect data when there is a trigger for it. Several of the case companies studied mentioned the COVID-19 pandemic to have increased their data gathering intentions, as more changes were possibly happening in the marketplace. The only company with formalized processes was company A, which was clearly the largest out of the five case companies and therefore also had the most resources assigned to MI.

Interestingly, as Ross et al. (2012) also examined, SMEs have several embedded processes within the culture rather than formalized processes. As was mentioned, it was precisely the culture that was on a higher level in most of the case companies compared to other aspects of the MI process. For example, several of the companies had an internal online messaging tool where employees could post MI information as they came across them. All interviewees also stated that continuous examinations, such as visiting the competitors' websites or googling for news on the key competitors was something that several employees were doing as a part of their day-to-day tasks. Carson et al. (2020, 5) further highlighted that the data collection in SMEs is normally seen to be part of another role rather than a formal business process, as was precisely the situation in all case companies examined. However, as Carson et al. (2020, 5) also note, having some structured MI processes, such as case company A did, provides the ability to gain more precise information on competitor insights and market trends. As was stated, company A was, in fact, the only company able to also focus on market trends rather than only competitive insights.

Furthermore, Lally (2010) found that companies with internal reporting as part of the MI process were generally more content with the knowledge of the market. Again, as company A was the only one with structured internal reporting, it was clear that they were also the most satisfied. Although the interviewee stated that they would need more resources, the company felt that the MI was very important, and they were satisfied with it. To compare, other companies stated comments such as "it is good enough for now", "we know we should have more structured processes, so maybe in the future", and "it works for us at the moment", and "we are B+ satisfied", indicating the level of satisfaction was not as high as with company A. However, companies B, C, and E truly did feel like at the moment no further MI was needed.

The factors affecting the level of MI

The author has distinguished several different reasons for why the companies have the type of MI processes that they do. As was predicted in various different studies in the literature review (see, for example Wright & Calof, 2006; Christen et al. 2009; Rouach & Santi 2001; and Hedin et al. 2011), the company size and resources are one of the largest factors in determining the level of MI. The correlation of size and the level of MI in this study can be seen in Figure 8.

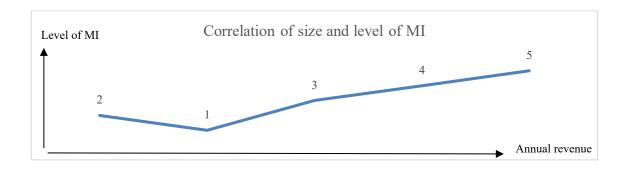


Figure 8 Correlation of size and the level of MI

In addition to size and resources, the table in chapter 2.5 examines the different factors that have an effect on how strong the MI structures are. The table was split into aspects that have to do with size, company characteristics, environment, and people. Already in chapter 2.5 the aspects that have to do with SME SaaS-companies in previous literature were highlighted in red. The researcher recognized that similar findings were visible in the case companies as well.

Table 10 below examines the level of MI from the size and company perspective, incorporating the number of structured MI processes and the importance of MI in addition to the resources and size. Here the resources of the company are defined as the combination of all of the resources used on the MI, for example employee time. On a company characteristic level, it was stated that Levet (2008) found the level of internationalization also had an effect on the MI level, and therefore the aspect was also added into the chart. The relationship with the management is also a crucial factor defining the level of MI (see, for example Wright & Calof 2006), and therefore also this part of the people aspect was added.

Table 10 Factors affecting the level of MI in terms of size and company characteristics

| Company | Size of the | Resources | Level of | Number of | Importance of | Level |
|---------|-------------|----------------|-------------|------------|----------------|-------|
| | company | used | internation | structured | MI and | of MI |
| | (employee | | alization | MI | management's | |
| | count) | | | processes | view | |
| A | 1200-1400 | Several people | Offices in | 5 | Very important | 5 |
| | | involved, | 14 | | | |
| | | bought | countries | | | |
| | | external | | | | |
| | | reports | | | | |
| В | 800-1000 | Part-time | Offices in | 3 | Relatively | 4 |
| | | work of two | 12 | | important | |
| | | employees as | countries | | | |
| | | main resource | | | | |
| С | 500-1000 | About 8 hours | Offices in | 1 | Important | 3 |
| | | a month | 12 | | | |
| | | | countries | | | |
| D | 150-200 | 10-15 hours a | Offices in | 1 | Not important | 1 |
| | | month of | 3 countries | | | |
| | | employee | | | | |
| | | work | | | | |
| Е | 150-200 | Mainly time | Mainly | 0 | Very important | 2 |
| | | spent on | operating | | | |
| | | communicatio | in two | | | |
| | | n in online | countries | | | |
| | | channel | | | | |

Interestingly, all size and company aspects examined in Table 10 also showed clear correlations in this study. For example, Oubrich et al. (2018, 33) stated how the relationship with the management had an effect on the level of MI, and it is clearly also visible in this study, as company A had the most reports going to the management, and it also had the strongest MI processes. However, company A mentioned that the information flow was mainly towards the management rather than two-ways. Many companies (A, B, and E) had ongoing MI conversations with the management team, as was also predicted in the study by Wright and Calof (2006), stating that the MI function's work was most often centered around the needs of the senior management. The management was

especially involved in company E, which makes the level of MI higher compared to company D, despite it having a smaller company size.

Therefore, it may be stated that the level of importance of MI in general and in the eyes of the management team may even be more crucial than company size in defining the level of MI in the company. The importance of MI also naturally had an effect on how many structured MI processes the company had, affecting the level of MI in the end. The level of internationalization is also naturally very closely linked to the size of the company. As can be seen from Table 10, it was also correlated with the level of MI, with the companies operating in more countries having higher levels of MI.

Table 4 in chapter 2.5 also identified the environment aspect to be of importance in terms of what affects the level of MI. The table showed that when there are large changes in the marketplace and a lot of competitors, the MI structures are stronger and vice versa. Additionally, B2B companies have stronger MI structures in general. The findings of the environmental aspect in terms of the case companies in this study are presented in Table 11 below.

Table 11 Factors affecting the level of MI in terms of the environment

| Company | Size of the | Changes in the | Level of competition | Industry | Level |
|---------|------------------|-----------------|----------------------|----------|-------|
| | company | marketplace | | | of MI |
| | (employee count) | | | | |
| A | 1200-1400 | Moderate | High | B2B | 5 |
| В | 800-1000 | Not that strong | Depends on market | B2B | 4 |
| С | 500-1000 | Low | Very low | B2B | 3 |
| D | 150-200 | Still unclear | Limited | B2B | 1 |
| Е | 150-200 | Limited | Few main | B2B | 2 |
| | | | competitors | | |

As can be seen, it can be stated that the level of competitors clearly has an effect on the level of MI as, for example, company A has a lot of competitors and company E only a few main ones according to the interviewees. However, the changes in the marketplace do not seem to correlate in the same way, as the companies with the highest level of MI, A and B, stated that the changes in the market are not that strong. With this being said, an important factor to notice is that none of the companies interviewed focused on market

trends but rather on competition. The fact that the level of competition is higher in relation to the changes in the marketplaces justifies this thinking.

This is interesting, because several studies (see, for example Capatina & Bleoju 2014, 191; Apostolov 2020, 3) highlight the significance of the changes in the global software industry as well as the vulnerability due to, for example, developments in artificial intelligence. However, although for example company E mentioned that machine learning and artificial intelligence have been changing the market, the interviewee also stated that the changes in the marketplace are still relatively small and have been so for the past few decades.

Interestingly, the literature on SMEs was relatively accurate also in defining the MI level in global medium-sized SaaS-companies, indicating that the fact that the company was operating with services as a software did not make a large difference. It must be noted, though, that all of the respondents are B2B-companies, as most SaaS-companies are (see chapter 3.2). Therefore, it is not clear how the industry has an effect on the level of market intelligence. However, the factors that could have made a difference are the level of competition, the relatively low changes in the marketplace, the internationalization level, and the fact that the companies operate in B2B. It is difficult to say which of these factors have to do with individual company characteristics and which have to do with the fact that the companies are global medium-sized companies operating specifically with SaaS.

It can also be considered that the importance of MI in the company would have the largest impact on the level of MI in addition to company size. For example, looking at company C, the company has one of the lowest resources used for MI and the competition and changes are not strong in the industry, as can be seen in Tables 10 and 11. However, the company has more advanced MI structures than the smaller companies D and E. This would suggest that company size does, in fact, have an impact in addition to the importance of MI in the company especially in the eyes of the management.

It must also be noted that all of these conclusions brought forward in the cross-case analysis are examined from a very small group of companies, specifically five different companies. Therefore, it needs to be considered that the conclusions are not exhaustive and still require additional research. However, the fact that the findings of the case companies are similar to the previous literature supports the previous findings and therefore affirms the findings.

5.2.2 Challenges of conducting MI in a medium-sized SaaS-company

Lackman et al. (2000, 7-8) identified four key issues for SME companies in particular when implementing MI systems. They had to do with the activity and value of MI, the value of the data sources integral to MI, the location of MI accountability in the organization, and the level and trend of MI resources. Interestingly, the main challenges that came forth in the case interviews focused primarily on these four aspects. All of the sources used in this chapter have also been introduced in the literature review regarding the challenges of conducting MI in SMEs as well as SME SaaS-companies.

A large aspect of the value of the data sources was that if human competences and knowledge is lacking, it is a large risk (Sadok & Lesca 2009). Company D emphasized this to be one of the main challenges in MI, as the industry is still developing and therefore it is difficult to validate the data. The company even stated that there are varying numbers in different reports, which results in the fact that no-one has clarity on what is, in fact, true. This also has to do with the fact that as there are limited resources and sources to gather the data from, it is difficult for smaller companies (Ross et al. 2012).

Furthermore, as SMEs are required to rely on personal networks for information gathering (Jin & Jung 2016) and a large part of the knowledge is tacit (Sadok & Lesca 2009), it is difficult to be able to gather all of the information into one place, as especially company A and B emphasized. Company A emphasized the challenge of gathering all of the information together and presenting it in a way that is as broad and objective as possible. Company B, on the other hand, emphasized the challenge of presenting the insights in a structured way as there is a lot of information in different places.

The location of MI was also considered to be either a challenge or a matter that had been discussed in companies A, B, and E. As stated, the MI was operating either within sales or marketing. Company B stated, however, that although now the employees working with MI are from the sales organization, the employees could have been from any function, but this made sense in the establishment phase. Company A stated that because the MI is under the marketing function, it lacks perspectives from other teams, such as the sales team. Company E stated that the lack of a clear ownership of MI limits the level of MI.

In general, market intelligence can be placed under the management, giving it a more comprehensive and holistic view (GIA 2013). However, this was not done in any of the case companies, perhaps due to the fact that the MI functions were still in their early

stages and did not have any one dedicated person working only with MI tasks. Company A also stated that it is sometimes challenging to fit all of the needs of different teams together, as the needs may vary largely.

The level and trend of MI was especially seen as one of the main challenges in company A and D, particularly regarding the lack of resources. Company A emphasized the lack of resources in general and company D stated the lack of time, as only about 10-15 hours was used for MI tasks. As Liu (1995) stated, one of the largest barriers for building a market-oriented company culture is specifically the lack of time. This was visible in the low level of MI in the companies where the resources were limited.

Additional issues particularly present in B2B SaaS-companies also came forth when defining the main challenges. The fact that there is no clear customer data available such as in B2C-organizations and that one buying entity can include several participants results in getting customer satisfaction information to be harder (see, for example, Ahlgren & Dalentoft 2020, 27). Therefore, as the companies acknowledged this challenge, companies A, B, and D had established some sort of customer survey or meetings after each sales pitch to understand the demand better. In fact, in company D, customer feedback was one of the main sources that drives development.

The fact that SaaS-companies often operate in only one specific industry (Ahlgren & Dalentoft 2020, 27) was seen as one of the main challenges for company D. Because the industry is still developing, the amount of research data was very limited. Therefore, the company had to strongly rely on an opinion-based viewpoint, which could limit the accuracy of the information, as Sauvola et al. (2015) also found. As SaaS-companies often target smaller companies as opposed to general software companies (Luoma et al. 2012, 191), one of the challenges may also be finding enough information on the customers, as was the situation in company E. They were trying to understand the dynamics of a specific market in case company E as well as why the customers are behaving like they are, but the information available was very limited.

Company D was the only company to state that one of the main challenges was the lack of importance within the company. All other companies experienced the MI to be of somewhat importance, even if it is not at a high level. As was established, company D had the lowest level of MI processes possibly largely due to the fact that it was not seen to be important in the company.

6 CONCLUSIONS

This chapter draws the analyses from the previous chapters together and attempts to answer the question of how global medium-sized SaaS-companies could build a market intelligence structure inside the organization. The chapter is divided into three sections, focusing on theoretical contributions, managerial contributions, as well as the limitations and suggestions for future research.

6.1 Theoretical contribution

Multiple conclusions can be drawn from the previous five chapters and this will be visualized in the final framework of the study. Previous research shows that there is no right or wrong way to build market intelligence structures or functions (see chapter 2). There are, however, several different aspects to be taken into consideration and a few options to choose from, if following previous research and this study. These are incorporated into the final framework of this study, which is based on the initial MI Maturity Index modified from Hedin et al. (2011, 224), that has already been presented in this thesis in two different forms. The final framework will incorporate both how a global medium-sized SaaS-company can conduct MI as well as what factors need to be considered. Both of these aspects have been investigated in the previous chapters, so the aim of the final framework is to combine the information presented earlier in this study, particularly in chapter 5.2.

Table 12 below summarizes the main findings from this study. The researcher has identified three different possibilities for global medium-sized SaaS-companies when considering conducting market intelligence in the company. The case-companies in this study all fit one of these descriptions, although a few of them were also on the border between two. In the table, each of the three possibilities, "firefighters", "beginners", and "coordinators" also show insights on what kind of best practices were raised in the case companies' interviews. This perspective is something that has not been visible in previous research and is therefore a unique finding of this study.

Table 12 Final framework

| | Firefighters | Best practices | Beginners | Best practices | Coordinators | Best practices |
|--------------|--|---|--|--|--|--|
| Scope | No specific focus. Ad hoc needs | - Internal questionnaires to management team in the strategy process to gain knowledge | Limited scope, seeking quick wins. Focus on CI and customers | - On-going investigation of e.g. visiting competitors websites, going to conferences etc. - Win/lose analysis on all cases on a quarterly basis to understand demand and how to develop | Wide scope, attempt to cover operating environment comprehensively | - Information sharing forum every quarter |
| Process | Reactive ad hoc processes. Uncoordinated purchases of info. | - Posting news as something is visible on internal intranet. - Customer feedback functions as an important source. | Info collection from secondary sources. Little or no analysis involved. | - Standardized interview questions for when a sales case is won or lost | Secondary info sourcing complements primary info collection and analysis. | - Customer surveys twice a year and an interview every quarter to understand market trends. - Reports also bought from external sources |
| Deliverables | Ad hoc quickly from scratch. | | Regular profiles complement ad hoc deliverables. | Battle cards and standardized files updated about competitors when as needed. Ad hoc analyses as needed and as the market changes | Systematic reports, structured MI output. | - Monthly MI report to the board. |
| Tools | Email and shared folders. | | Corporate intranet emerging. | - Internal platform for MI news sharing | Web-based MI portal established. Users receive email updates about new info. | |
| Organization | No resources dedicated specifically. | - The goal is for each product manager to have intense knowledge about the trends in that specific field | One person appointed as responsible for MI. | - One person responsible for MI (only part of their work) | A fully dedicated person manages MI and coordinates activities. | |
| Culture | No shared understanding about role and benefits of MI. | | Some awareness exists of MI, but culture is still neutral. | - Internal platform for MI news sharing | Moderate MI awareness. Sharing of info encouraged. | - Internal platform for MI news sharing - "Lunch and learn" sessions to focus on certain competitors - Occasional internal webinars focused on winning against certain competitors |

| Aspect | Firefighters Coordinators |
|-----------------------|--|
| Internationalization | Low → High |
| Size of the company | Smaller → Larger |
| Importance of MI | Not very important → Very important |
| Level of competition | Limited → High |
| Age of the company | Younger → Older |
| People involved in MI | Mainly marketing and/or sales → Entire company on a global level |

The second part of Table 12 shows which aspects need to be considered when considering what type of MI structures to build. It also sheds light on the possible restrictions, and helps in pointing to the most accurate option. For example, if a larger company has a high level of internationalization, has a lot of competitors, is open to having the entire company involved in MI on some level, and holds MI to be more important in the company, it is most likely to also choose the option of a "coordinator" rather than a "firefighter". It would also suit the company better, on the basis of what previous research says as well as what the findings of this study indicate. The second sub-question is also answered in the table, as it shows which aspects medium-sized SaaS-companies need to consider when building MI processes.

In general, the findings of this study contribute in a theoretical aspect in two ways. Firstly, it confirms the previous research made on the subject. Previous research stated that SMEs have different ways to conduct MI compared to large corporations, that they often have non-structured processes in place, that they rarely have an assigned team for MI, and that firm size has an effect on the level of MI, to state a few examples. These were all confirmed in the study. All of the factors were analyzed in detail in chapter 5. There were only two findings from previous research that were not confirmed in this study, possibly indicating that the characteristics of global medium-sized SaaScompanies differ from general literature or that not enough previous studies have been made on the wide spectrum of the matter. GIA (2013) stated that it is useful to have MI in its own team under the management to allow for a comprehensive view, but this was not the case in any of the companies. The second finding that was not supported was the fact that the changes in the marketplace were not large, as would have been predicted by the findings of Apostolov (2020, 3). Further research would need to be conducted to understand whether the changes are due to the precise narrowing of the case companies, or if the previous research cannot be considered universal.

Secondly, the study also contributed with **new evidence by framing the findings in a framework**, giving ways in which the companies at hand can conduct MI, as well as showing what could be considered best-practices for the companies. Three concise ways of conducting MI in global medium-sized SaaS-companies were brought forward, which is a unique contribution to academic research. The way in which MI can be conducted in the companies was examined through the scope, process, deliverables, tools, organization, and culture of the MI process and company adopting it. The findings show that if the company has the prerequisites, as shown in the second part of the final framework, it is able to have a market intelligence process that has a wide scope, combines secondary and primary analysis, has systematic reports and structured MI output, has a web-based MI portal, a fully dedicated person to manage MI, and moderate MI awareness with the sharing of information being encouraged. This enables the company to be more content with the structures they have in place while understanding about the market in addition to the competitors.

The main findings in terms of which factors then affect the company to be able to have such structures in place were especially internationalization, a larger company size, having emphasis on the importance of MI, having a high level of competition, having more experience through an older company age, and having more people involved in the MI process. Therefore, the conclusion may be drawn that the companies that have these characteristics have the chance to improve their MI processes to the level of a "coordinator". On the other hand, if the company would wish to improve their MI processes to the next level, they can improve one of the factors, for example involving more people in the process.

The research also managed to identify the two main factors influencing the level of MI in the company and how it is conducted, as presented in chapter 5. According to this study, company size and how important the management sees the MI processes in the company had the largest impact on how the MI was conducted. In fact, companies with the largest size and the largest importance on MI also had the most structured processes in place. Furthermore, a company that was smaller in size, but still had more emphasis on the MI process and its importance, had a higher level of MI than a larger company with possibly more resources to give on a theoretical level. This further contributes to the fact that the companies in question have to consider different aspects when conducting MI, because if the company wants to have a proper understanding of the market, emphasis needs to be put on the importance of the process despite the size of the company.

It must also be considered that although the researched companies only reached the bottom three levels of the initial framework modified from Hedin et al. (2011, 224), it does not necessarily mean that it could not be possible. All five interviewed companies were either "firefighters", "beginners", or "coordinators" and none of them were "directors" or "futurists". This begs the question of whether it is a threat or an opportunity. Is it so that it is not possible for global medium-sized SaaS-companies to reach these levels, or have the companies merely seen that it is not necessary? Could it be that if a similar company would pursue a "director" level market intelligence function it would result in a competitive advantage? These are questions that could be researched more in future studies.

However, according to previous studies, it has been said that smaller companies do not need systematic MI programs in general, partly due to the efforts and finances required (Hedin et al. 2011, 6). This is in line with the interviews in this study. Although several of the companies stated that they could benefit from a more systematic MI process, they do not have the resources needed, even though the need for MI is seen and understood. Therefore, one could say that these companies could not have built MI structures that reach higher than the "coordinator" level. It is not, however, visible what would happen if these companies would, in fact, invest more in MI. As discussed in chapter 2.4, smaller companies that use MI data are proven to make better decisions (Cacciolatti & Fearne 2013, 17), so therefore more research on the subject may be justified to understand the question of whether investing more in MI would in fact build competitive advantages.

Furthermore, this study also proved that there are large differences even between medium-sized companies in their MI processes, as was not clear from previous research. This study showed that in addition to the company size, aspects like interest towards MI differed largely between the companies, although in previous research SMEs are often grouped together as one group, not showing the variations in between the different companies in that group. This is a finding that is crucial to point out in this study but also something that can be considered to be important for future studies as well.

In terms of the third sub-question, the challenges that the companies face in conducting MI, the findings support previous studies. The main challenges were in line with the findings of Lackman et al. (2000, 7-8), with the main factor being lack of resources, as was established to be the main challenge in chapter 3. Other challenges that were raised were the difficulty in finding accurate information, not having a clear person

in charge and therefore lacking ownership, incorporating everyone's views in the process, as well as the lack of importance of MI in the company.

It must be noted that as the researcher states that the findings support previous studies, it supports studies made on SMEs, companies in general, or SaaS-companies in general. As was stated in the beginning, the studies on MI in global medium-sized SaaS-companies are very limited. Therefore, one can also consider that the findings of this study are all unique and contribute as theoretical findings in each form, even if they are only confirming previous research.

6.2 Managerial implications

In addition to the theoretical implications discussed in 6.1, this thesis also contributes to research management. In fact, chapter 5 can be thought to have contributed to research management on its own as well, as the view is from the companies' perspective. The applications drawn from this study can be applied in similar companies according to the final framework. In addition, the best practices identified allow for companies to get a very hands-on view of the subject if necessary. The framework provides:

- An explanation of three different ways a global medium-sized SaaS-company can conduct MI
- 2. Best practices available for each of the different phases of the process
- 3. Factors the company needs to take into consideration in the process

As suggested by previous research and the final theoretical framework, managers have the opportunity to develop their MI capabilities to a higher level while considering certain prerequisites. Many of these prerequisites have to do with environmental factors, such as the level of competition or the changes in the marketplace. Naturally, these are factors that managers do not have control over. However, managers do have control over the other factors, such as importance put on MI, and the people involved in the process.

These aspects are all drawn from real case companies battling with similar challenges, and therefore can be incorporated into similar companies. The fact that the interviewees asked for the results so they could get the opportunity to develop their own processes further proves that simply understanding what other companies are doing helps

in understanding whether the company is doing the right things or if there is something that could be developed.

Furthermore, in terms of managerial implications, especially the best practices identified that add to the three levels of MI are clear propositions for what managers can start to incorporate into the processes, if a wider scope is valued. The aspects identified (scope, process, tools, organization, and culture) can all be impacted by managers when looking into a desired level of MI. The author of this research will not lay out all of the different possible types of MI in writing, as they are all presented in the final framework. Nevertheless, it is crucial to point out the fact that as managers in global medium-sized SaaS-companies are presented with three clear possibilities to start developing MI, it is a unique finding of this study in a managerial aspect in addition to the academic viewpoint.

In addition, it may be useful for managers to understand which challenges other companies are facing. The fact that one of the main challenges is the lack of resources is difficult in the sense that several of the companies interviewed still consider MI to be important. If the management considers MI to be very important, but there is still a lack of resources, it is a clear challenge for the company and its managers. The question of how to get precise resources or functions added into MI without increasing the overall budget in the company, for example, could be researched more in the future. In addition, the question of whether managers could actually pursue higher levels of MI was introduced in the theoretical contributions. This is an aspect managers can take into consideration, especially when growing as a company to become a larger enterprise as opposed to an SME.

Moreover, the slight contradictions in the literature review and the empirical findings of the study suggest that the managerial implications are partially company specific, allowing for managers to create MI in various ways. All of the companies had very different MI structures, although most of them were relatively satisfied. Therefore, it also adds to the positive view of managers being able to develop their processes while also having the freedom to change processes so that they best suit the needs of the company. Moreover, it can even be suggested whether there is enough previous studies made on all of the various aspects of the matter and therefore the theory and the empirical findings may also differ in certain areas.

6.3 Limitations and suggestions for future research

This study examined the question of how medium-sized SaaS companies can conduct MI by also answering three sub questions. Although this study undoubtedly contributes to the field largely due to the lack of research of the subject, the author recognizes clear limitations, as with any study.

Firstly, there were only five companies interviewed and they were all interviewed with a semi-structured interview process. Although the open-ended questions allowed for very efficient and broad data-gathering possibilities (Meyer 2001, 345), this type of an interview process can allow for bias, as it relies largely on the interviewees perception of the phenomena (Eisenhardt & Graebner 2007, 28). Therefore in addition to a larger amount of cases in future research, perhaps an ethnographic study could result in an even more accurate view of the situation in the next study, as also suggested by Helfat and Winter (2011, 1245-1249). This type of a study method would allow for observing the processes over a longer period and to see the processes in action, limiting bias.

Although the companies were chosen from very different fields, it portrays a very small portion of medium-sized SaaS-companies, especially global ones. This relates to the second point, meaning that all of the case companies had some kind of affiliation with Finland. The situation could be very different in a market that is not mature yet. Therefore, future research on the matter may be investigated from other markets. The third aspect, although it may not be as influential, is the fact that this study was conducted at the time of the COVID-19 pandemic. Although none of the companies mentioned their MI-efforts had changed drastically exclusively due to the pandemic, it may have resulted in a higher percentage of respondents rating MI to be "very important", for example. This is due to the fact that market trends, changes in the marketplace, and recessions have been common topics in the news recently.

For future studies, the author of this study believes it would be beneficial to research the situation at a different time with more companies from various markets. In addition, the question of whether global medium-sized SaaS-companies could potentially pursue higher levels of MI could be investigated in future research as well. Because there is a very limited amount of studies executed on the matter, any further studies would further contribute to the academic field and overall understanding of the subject.

7 SUMMARY

This thesis focused on answering the question *How global medium-sized SaaS-companies* conduct market intelligence. In order to be able to answer the main question in the best way possible, three sub questions were laid out. 1) *How do companies conduct MI and* which factors effect it? 2) What needs to be taken into consideration in MI particularly for medium-sized companies? 3) What are the challenges in conducting MI for medium-sized SaaS-companies?

First previous literature was reviewed, after which a qualitative research was conducted and the results analyzed. Previous research on the subject was very scarce, but nevertheless it was possible to bring clear findings into light. The literature review consisted of two separate chapters, one focusing on conducting MI and what factors need to be considered, and the other on the challenges. Some of the main insights from previous literature were that there are multiple ways to conduct market intelligence in companies, that the adoption varies largely between SMEs and other companies, that there are multiple factors to take into consideration for SMEs to be able to conduct the level of MI desirable, and that one of the main challenges is the lack of resources.

The empirical part of this study was done through a qualitative study as a multiple case study by semi-constructed interviews. The interviews consisted of five separate case companies, and the aim was to understand how these companies fitting the description of the thesis topic conduct MI themselves. By analyzing the case companies through a cross-case analysis, the author of this thesis found that the empirical findings of this study supported previous literature. All of the key findings above were supported, meaning that global medium-sized SaaS-companies' MI processes behave relatively similar to general global SME and SaaS-companies.

In addition, as a theoretical and managerial contribution, a final framework was laid out. This worked as a summary of the insights found in the study, combined with an initial framework from previous literature modified from the study by Hedin et. al. (2011, 224). The framework provided three various ways in which global medium-sized SaaS-companies can conduct market intelligence, what types of processes they have in use, and what needs to be considered for managers.

In conclusion, this thesis contributed to both academic and managerial findings in many ways, partly due to the limited availability in previous research. Naturally the study also has limitations, and one of the main suggestions for future research was that the study could also be conducted at a different time with more companies from different markets.

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APPENDIX

Appendix 1. Interview Questions

Directing of MI

- 1. How would you rate the level (of sophistication) of your company's MI from 1-5?
- 2. When did you start feeling the need (or not) for MI in the company and why? If you do not have MI, what is the reason for it?
- 3. Please describe how the market intelligence works in your company.
- 4. What do you see as the main challenges of conducting MI (or not) in your company?
- 5. How strong do you feel the changes in the marketplace, certainty, as well as the competitive field are in your industry?
- 6. What is the background of the employees working with MI?
- 7. Who does the person in charge of MI report to and how much does the management team interact with the market intel?
- 8. What are the resources used on the function (on a scale of 1-5 if not willing to give information on specifics) and how happy are you with it?
- 9. What do you see as the main benefits of having/not having MI?
- 10. How do you wish to conduct MI in the future? Do you already have any future plans?

Collecting of MI data (if collected)

- 11. How often is data collected and how (e.g. are there regulated processes or is it ad hoc)
- 12. Do you focus on specific markets or several different markets or countries?
- 13. What are the main sources used?
- 14. Do you have internal questionnaires or something similar set up on a continuous basis for the use of MI?

Presenting MI insights (if presented)

- 15. What forms are used for the presentation of the insights and how often are they communicated?
- 16. How broad is the distribution of the data?
- 17. How important is MI in your company and what does the management team think about it?